

The Higher Realism

DUSTON KEMBLE



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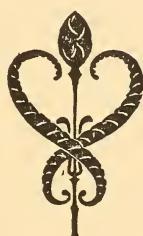
The Higher Realism

BY

DUSTON KEMBLE

“In Him was life, and the life was the light of men.”

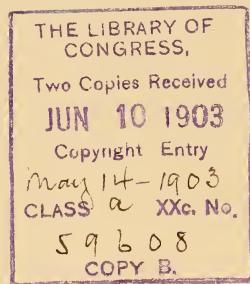
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TO THE MEMORY OF
PROFESSOR OLIVER MARCY, LL. D.,
SOME TIME ACTING PRESIDENT OF
THE UNIVERSITY IN EVANSTON,
THIS LITTLE BOOK IS AFFECTIONATELY
INSCRIBED
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PREFACE



MUCH of the matter contained in these pages was originally jotted down to preserve occasional thoughts on philosophy. These have gradually taken on a more regular form, and finally resulted in this little volume. The author certainly has no intention of entering far into the technical discussions of present-day thought; and he hopes to be not very tedious in the subjects here treated, although some of them might be elaborated to an indefinite length. Some of the views given are believed to be new; but they are confidently left to the liberal judgment of those who love the highest Truth, and who care to find therein an aid to ultimate Faith and Hope.

DUSTON KEMBLE.

Cleveland, Ohio, September, 1902.

The Higher Realism

I

GENERAL NOTIONS

IN this fair world of ours, which is goodly and orderly, although hampered by a few serious drawbacks, each thoughtful person may be supposed to have some glimpses of high things. At least he may have occasional thoughts of excellence, of truth, and of moral beauty that come over him like a blessed vision from above, and inspire him to lofty ideals and noble endeavors. But as sunshine and clouds follow each other in the earthly sky, so light and darkness, comfort and stress, are the changeful lot of every man; and each of us has to live in his own special world, according to his birth, occupation, and surroundings. Yet every earnest man, even a savage, is more or less prone to ask questions, and in some way to conceive answers to those questions. He does this because he is a man, and therefore able to question, to think, to fear, and to hope. No doubt there is in many minds a love of truth for its own sake; but there is in all men, to some extent, a love

of truth for its practical value, whether they be farmers or merchants, artists or statesmen ; and upon the correct answers to their questions depend the ultimate issues of human life. Therefore, we must study philosophy.¹

What is Philosophy? First, it is a term used to express a consideration of the nature and reliability of human knowledge. Second, it is an effort of the human mind to find a reasonable set of answers to its own questions concerning reality, origin, destiny, duty, and hope.

Sensible men, though earnest thinkers, do not pretend to have full possession of these highest truths ; for that would be the supreme wisdom which belongs to God alone, and not philosophy. What they may profess is merely that they are enamored with the study of the highest truths, and are earnestly cultivating this as a pursuit that may be partly realized, although never completed. From the earliest ages of history Philosophy has engaged the attention of many eminent minds ; but only in recent years have the advancement of physical science, the spread of general intelligence, and the gradual refinement of criticism made possible a truly well-grounded system of facts and principles for ultimate truth.

¹Many of the footnotes in this book are merely general references upon the subject in the text. But others are special and explanatory.

In entering upon so extensive and deep a study as this, we are well aware that it is no easy task to say anything new upon topics which have been so long under discussion;² yet we are encouraged to bring forward a few views of our own by two principal considerations. First, that with all its past endeavors and successes, philosophy is still far from having reached its goal. Something is yet lacking here that is not lacking in Nature; namely, the sense of satisfaction in a union of the ideal with the practical, and of the physical with the spiritual, in a manner to serve as the rule of life to men in everyday circumstances.³ Second, that in any case, since the quality of one's philosophy depends upon his temperament, his mental horizon, and the state of general culture in his own environment, it follows that there may be as many views of philosophy in this world as there are men to construct or to express these views; hence there is always a possibility of something new.

But what is clearer than either of these considerations is the evident fact that philosophy, in common with other departments of human progress, is like a tree in ever growing and adding something to itself as the seasons come and go. True, some good writers have gone so far as to declare that the results of all philosophy up to the present time are

²Royce's "Spirit of Modern Philosophy," page 343.

³Appendix. Note 1.

but a heap of massive, though finely-wrought, stones from the quarry, a congeries of beautiful fragments with no visible bond of harmony between them.⁴ Still we trust that out of these stones may yet be erected the temple of Truth, beautiful in proportions, majestic in outline, and filled with that Spiritual Presence which answers and satisfies the deepest questionings of the soul.

Let us glance briefly at some of the noble work that has already been achieved in this field, part of it long ages since.⁵ The Eleatics and others before Socrates anticipated many profound modern theories, but that was rather by guessing than by critical research. Socrates was the first real philosopher in the modern sense, because he examined his ground with critical care, and at the same time sought the improvement of his fellow-men. His watchword was "Know thyself," which proved to be indeed a very fair beginning for philosophy. After him came Plato, who rose far above his master in setting the beautiful and eternal world of Ideas before the minds of men as a new continent to be explored, conquered, and possessed. Then Aristotle constructed his great system of truth upon the viewless lines of Method, and made it the most

⁴Stuckenbergs "Introduction to Philosophy," page 36.

⁵Weber's "History of Philosophy," *passim*. Also Bascom's "Historical Interpretation of Philosophy" contains a fine presentation and luminous criticism of the principal ancient and modern philosophers from the standpoint of Intuitionism.

scientific contribution of the Greek mind to the progress of the world in civilization. Then followed ages of Skepticism, Gnosticism,⁶ and Scholasticism, cloud-built and mostly empty, until Bacon arose, and later Locke, who proposed Experience as the quarry from which fresh rock might be hewn to finish out the edifice of Truth, but half constructed by the ancient Greeks.

And now came various other masters, seeking, as experience developed more and more, to find some mode of union for the Old and New.

And this was well conceived, for the product of the new labor is Science, and the essence of the old wisdom was religious Faith, whatever that may seem to mean when subjected to the analysis of critical Thought.⁷ So Science must now be joined by a true and sound Philosophy to the earliest and loftiest intuitive notions of the human mind.⁸ It is a striking fact that many of our greatest modern philosophers have made this union the avowed object of their theories and systems. Such was the attitude of Des Cartes, Spinoza, Berkeley, Leibnitz, Kant, Hegel, Schleiermacher, Herbart, Hamilton, and a number of others. Each of these in turn pro-

⁶Strongly allied to the philosophy of India..

⁷"The great world struggle of developing thought is continually foreshadowed in the struggle of the affections seeking a justification for love and hope."—George Eliot in "Romola," Chapter II.

⁸Emerson's Address of July 15, 1838.

fessed to believe that he had discovered a true defense of religious Faith on the firm grounds of inexorable logic, and proceeded to unfold the same in the terms of philosophy.⁹

However, as we have said before, the present state of philosophy is still unsatisfactory. On the one hand, speculative thought has departed so widely from the paths of common thinking,¹⁰ and has spun so many cobwebs of subtle dialectics, that when it does still keep to sound reasoning—which it does not always do, by any means—men are not able to grasp or to follow that reasoning to any practical conclusions.¹¹ On the other hand, the thought that is employed in merely searching out the natural history of the world-process too often ignores or denies all that underlies this process, and practically shuts off the deeper inquiries of the human soul.¹²

Thus the result on both sides tends constantly to either Pantheism or Agnosticism, and the outcome is little less than a fearful whirlpool of endless Evolution mingled with endless Catastrophes.¹³ In short, the union before mentioned is not realized, and it is no wonder that the spirit of Pessimism

⁹Some, however, are totally opposed to religious Faith.

¹⁰Bowen's "Modern Philosophy," pages 382, 383, and 396.

¹¹Mrs. Ward's Introduction to "Amiel's Journal;" also the same writer in "Robert Elsmere." A common defect of German philosophy.

¹²The spirit of English philosophy, and especially of Herbert Spencer.

¹³Haeckel's "Des Weltraetsel's Loesung."

grows apace in the world.¹⁴ We must inquire, therefore, whether there is not still some way by which the great questions of the soul may be solved for us in a rational manner without destroying the foundations of moral character, and so turning back humanity into a wilderness of despair.¹⁵

One thing that certainly has been done for us by modern thinkers is to define our problems; and these when reduced to the fewest number, we take to be the following:¹⁶

1. The problem of *knowing*.
2. The problem of *being*.
3. The problem of *relations*.
4. The problem of *finality*.
5. The problem of *duty*.

All these are fundamental problems of life, and however imperfect our views of them may be, still upon those views depend almost exclusively the ultimate reasons for our success or failure as men. Since our life so largely depends upon the right solution of these problems, it occurs to us to ask, Why not begin with Life as a basis for our further study of philosophy?¹⁷ Of course, a few things that are a part of every complete human life must be taken for granted, to begin with, else all our dis-

¹⁴Van Dyke's "Gospel for an Age of Doubt," Chapter I.

¹⁵Appendix. Note 2.

¹⁶Kuelpe's "Introduction to Philosophy" contains quite a list of such problems.

¹⁷Baldwin's "Philosophy and Science," page 9.

cussion will end in empty phrases. Therefore consciousness, reason, language, and some experience are assumed as valid at the very outset, although this will not prevent us from looking back again to these things on some later occasion. We must also assume the ordinary forms and methods of Logic, only returning to them, by and by, to reassure ourselves of having avoided any inconsistencies that would vitiate our course of reasoning.¹⁸

There must be a right way as well as a wrong way of going about any earnest task. Should we go the wrong way, the result will be confusion; but if we go the right way, it will be manifested in the outcome of clear light and enduring satisfaction, which is the only proper aim of true philosophy.¹⁹

We have stated our purpose to use Life as a basis of reference in the work before us. Our reason for so doing is that the element of Life is the only one that touches, involves, and unites all the great problems that we have indicated.

We do not undertake here to raise the inquiry as to which is the primordial element or principle upon which all else depends, since there is no ground for crediting the existence of any such element or principle. Certain of the ancients assumed the earth,

¹⁸ Appendix. Note 3.

¹⁹ We would not, however, delude any reader into supposing that definite results can be attained without earnest and prolonged reflection. We shall do well if we reach true light after much labor.

air, water, fire, number, or fate, as such a primordial element or principle; but none of these yields any adequate results as an explanation of the existing order of things.

Among modern thinkers, such conceptions as infinity, monads, correspondences, mathematical and logical necessity, identity, being, the absolute, and the will, have each been assumed from time to time as the resolving principles of the world and all its problems; but, as already stated, none of these gives practical satisfaction to the questionings and needs of a common man.

Nor do we mean to say that Life is a primordial element or principle in the sense of the doctrine of Hylozoöism, or Panpsychism, which endeavors to explain all mysteries by merely ignoring the distinction between the vital and the non-vital elements in nature. We shall use the term Life to designate simply the inner, actuating source of vital phenomena, including plants, animals, and the human species. Then, by uniting the cause with its effect we may include the vital phenomena themselves and also their outcome in the manifold relations of life, under the same head.

Among our reasons for this choice of a starting-point is this: that without the presence of Life as a foundation of personal consciousness, all else in the world would be as though it had never existed at all, so far as Philosophy is concerned; for there

can be no philosophy without a philosopher. Considered intensively, then, toward the root of the subject, philosophy begins in life as furnishing the power of self-conscious experience and reflection. But considered extensively, like an opening bud or flower, the interpretation of life in its wider senses is the climax of philosophy. All must agree that the origin of life, the means of life, and the objects of life are among the profoundest and most practical of all inquiries, and their importance is daily more recognized by the wisest and best among us as fruitful objects of investigation.

In the lower forms of life, heredity, environment, and stimuli are the decisive factors; on its higher planes, thought, temperament, opportunity, and ideals, are the lines and forces by which the place of each Life in the possible scale of existence is actually determined. Yet the lowest creatures or spores in the vital scale are separated by an impassable gulf from all non-vital elements, even while they may depend upon the latter for their subsistence. Here also is found the only right basis for the doctrine of "values," lately much in vogue, and justly so. Instead of taking a mere arbitrary judgment or a capricious personal taste as the standard of values for each individual, our aim will be to exhibit the contribution to Life itself, to its comfort, nourishment, development, enrichment, happiness, and elevation in the scale of Being, as the practical measure

for all values, a measure that must finally be acknowledged by all intelligent men.

Again, what we call Life touches upon both the future and the past as the active, originating element in a vast sphere of existence, ever emerging into new forms; and still, through all changes and vicissitudes, overcoming its limitations of environment or physical condition, and leading on toward final perfection and dominion over all the other elements. Thus it is that Life rises far above the subject matter of such sciences as Physics, Mechanics, Astronomy, Geology, Mineralogy, or Chemistry, since these alone would give a universe that were little better than chaos, with no feeling, no thought, no interest, nor outcome. But Life itself would be little better than chaos without its possible development from lowly beginnings upward to the sentient soul, and to the history of the human race.

Finally, we must take Life as the true basis of reference in philosophy, because it is the *nidus* of self-consciousness, and also the *nexus* between Thought and Things.²⁰ As, when a flower is pulled into pieces, we can describe the various parts, but they are no longer a flower, since the mysterious element that made them such is gone forever; or as, when the human body is dissected, all the various parts and organs can be traced and described, but that which made them organs is gone, so that they

²⁰Cf. the "Harmonic Diagram," page 104.

are no longer anything but dead matter, so is the attempt to construct a philosophy of the world without giving the first place in it to the element of Life. Such an attempt is "like the play of Hamlet with Hamlet left out."

It is true that Life seems complex in itself, yet that needs be no impediment to our adoption of it as the starting-point of philosophy, since, in a general way, all the elements of existence meet in Life as nowhere else. Here the storied legends of History, the manifold revelations of Science, the age-long treasures of Art, and the sacred mysteries of Religion stand on the common ground of human consciousness; and Philosophy must take all of these into its account as parts of a world interpretation.²¹

Beginning then with Life, not as a mere abstract point of thought, but rather as a surveyor's basis of reference for many points, we shall find as we proceed in our study that we are not held down to the place where we started; but we shall rise, as on a hill-side, to a constantly broader view, and one that is far more worthy of our mental and moral faculties than any quasi-mechanical conception of ourselves and of the world around us.²²

Now, since each of our problems has a special

²¹There may be as many special departments in philosophy as there are in practical life, social, political, financial, industrial, artistic, etc.

²²The German *Weltanschauung*.

point of approach, it is from these that we shall name our next four chapters, Intuition, Reality, Consistency, and Transcendency. These are the rational steps up which the soul of man must climb in order to look out upon the Visible and the Invisible, the Present, Past, and Future.

II

INTUITION

SINCE *knowing* is the first problem before us, we may begin our discussion with such inquiries as, How do we know that we know anything? Is the human mind an entity or a phenomenon, and what is the basis of its trustworthiness? The leaders of the "Associational Philosophy,"¹ and many recent writers on Psychology, in their efforts to analyze all mental processes and trace them back, step by step, to their beginnings in the very simplest relations and movements as pure actions and reactions of the nervous system, certainly evince a tendency to adopt a view of mind as mere phenomenon or a physical product. On the other hand, those who oppose this view seem generally inclined to regard each mind as dependent upon the body for little more than its sense-perceptions of the outer world; and they insist that there can be no real thought except under the cloudless skies of Consciousness, which belongs to the mind in contrast with the body.² In

¹Spencer, Mill, and Bain.

²Reid and Hamilton. Others still more strongly.

our opinion, either of these views is far from satisfactory, although each contains some truth. In a correct analysis, the data supporting each of the above doctrines overlaps those in support of the other.³ Therefore, both sides must be heard in order to have a complete account of the human mind. The true view, in the light of recent biology, seems to be that mind is an outgrowth of life,⁴ as stated in our previous chapter; but only in the highest order of natural life does the living subject attain to self-consciousness and to the power of progressive reasoning.⁵ We shall, therefore, endeavor to examine very briefly the ordinary development of mental powers, the general relations of life and rationality, and finally the basic principles of knowledge.

MOVEMENTS.

Movements, which are a constant sign of life in either the animal or the human body, are of two kinds, involuntary and voluntary. The former are such as the beating of the heart, respiration, digestion, and movements of the various internal organs. The latter are such as walking, eating, playing, engaging in labor with the hands, or carrying on a conversation; although these last are almost limited to man. But we find there is a middle ground where

³Muensterberg's "Psychology and Life," Chapters I, II.

⁴Bascom's "Comparative Psychology."

⁵Bowne's "Metaphysics." Chapter on "The Soul."

voluntary movements shade off by degrees into the involuntary, either sensibly or chronologically; as in closing the eyes to avoid excessive light; or in throwing out the arms to avoid a fall; or in a partial control of respiration or sleep; or again when hunger, thirst, or excitement crowd upon the natural control of the voluntary movements. In fact, voluntary movements appear to begin almost from the earliest existence of the body as something *instinctive*, in moving the limbs, or head, in opening or closing the eyes, in taking nourishment, in uttering sounds of distress, or fear, or desire, or pleasure; so that this instinctive movement constitutes the beginnings of activity and of experience without regard to any mental acts or processes.⁶ Whether feeling or will is primary in the mind is a much vexed question, but cognition is usually placed after these two mental qualities or powers. If, however, feeling be reduced to mere sensibility, will to spontaneous motion, and cognition to a real, though unconscious, apprehension of certain facts and relations, it will be found that mentality in some fashion reaches to the lowest forms of animal life, though hardly to the world of plants.

INSTINCT.

Since an “unconscious intelligence” is hardly intelligible, we use the term Instinct to designate the

⁶Sully's “Human Mind,” Volume II, page 179.

apparent intelligence of the animal world, and to a certain extent of plants also. The migrations of birds, animals, and fishes, their universal care for their offspring, their sense of direction, their special choices of food, their provisions of food and shelter against the winter season, or their tactics of concealment and defense against their natural enemies—all these, and many more illustrations that might be adduced, show that there is in the wild creatures “a propensity that is prior to experience and independent of instruction,”⁷ which leads them by mysterious paths through the difficult and dangerous passes that are incident to all forms of animated being.⁸

Some have thought to account for Instinct by referring it to reflex nervous action;⁹ but this will hardly suffice, since plants also show similar unconscious powers. Young trees in the forest stretch up their tops to seek the sun and air. Their roots also reach far off to one side toward a friendly spring or stream of water. Vines will cast about like blind men seeking for support; but finding it, they seize hold directly and climb up to spread their leaves in the sun. Water plants ascend to the surface for flowering, then sink again to the protecting depths. Many plants also turn leaf or flower to follow the

⁷Paley's Definition of Instinct.

⁸Wundt's “Human and Animal Psychology,” Sections 23-27.

⁹Herbert Spencer in ‘Psychology,’ Volume I, page 422.

sun in his daily course to profit the more by his heat and light. If these are not cases of true Instinct, at least they are very similar to it in a rational ministry to the requirements of each humble life.¹⁰

But we may go even further, and find the same active element in nearly all the organic processes of Nature. The desire for fresh air and exercise, the craving for certain kinds of food and drink, the selection by the blood and nerves of the proper materials for every kind of tissue, and even the self-healing power of the body, are all manifestations of the same character, showing the mysterious power that is wrapped up in all Life.¹¹

We have already seen that Man is not without his instincts also. Indeed, they are the starting-point of his entire mental development; for his early progress in the use of his hands, the art of walking, and even the learning of language, depend far more upon the propensity to unconscious imitations of his older fellows than upon mental reflection and definite purpose. He learns, as the lower creatures do, by first discovering his possibilities in imitation.¹²

¹⁰If it be insisted that these external influences act as stimuli, we observe that there are no stimuli, except in so far as the inner nature of the living thing acts by them or upon them to serve its own interests.

¹¹We regard all these instincts and vital acts as showing by their essential rectitude that our natural Intuition is also a trustworthy basis of knowledge.

¹²Baldwin's "Imitation" in "Philosophy and Science."

MENTAL EVOLUTION.

In some respects man actually falls below those creatures at his birth, for he is then inferior to most of them in physical powers, and in his equipment of instincts. A chicken or a young calf can balance itself, walk, follow its mother, and take its natural food, prior to all experience, and with almost perfect facility. It seems as though these creatures were born with an intelligence that puts to naught all the school theories of our mental development. To a certain extent, however, the lower creatures also experience a mental evolution. At any rate, we see them learn many things by experience, as when kittens learn to catch mice, dogs learn to follow their masters, squirrels learn to hide from a hunter, cattle learn to go to the stall, horses learn to understand the driver's commands or the notes of a cavalry bugle, and a parrot will learn to speak, if not to use, many words. To a close observer, the psychic life of the lower animals is really wonderful for its variety and intensity, and even for a certain keenness or delicacy of apprehension, which is often beyond the faculties of a man, though unframed in words or in logical processes so far as we are able to discover. They have strong feelings, they show great persistence in accomplishing their aims, and real sagacity in meeting contingencies. No wonder that men come to love horses and dogs!¹³

¹³Cf. Romanes's "Mental Evolution in Animals."

When we compare the actions of animals with those of the human species, it seems folly to deny that a large portion of the every-day acts of men are no more rational than those of animals, and that their mental life is actually developed in much the same manner and along similar lines. For example, much is said in current writers on psychology about "the training of the senses" by experience, as in touch, hearing, and sight, where form, directions, and distance are all made known by mental inference rather than by direct sense perceptions.¹⁴ No doubt this theory is true to a great degree, though it is hard to see how a young chicken, or even a baby, could have time to cultivate its space-perceptions before getting its first dinner; and there are many other examples looking in the same direction.¹⁵ In any case this training must be unconscious for the most part rather than deliberate, since a spider performs wonderful engineering feats at an early age, and without a course in engineering. So a boy will learn to spin a top, or shoot at a mark, or fly a kite, or play a dexterous game of ball, with intelligence, yet without any conscious reasoning; and it is done all the better because of this unconsciousness.¹⁶ To

¹⁴Sully's "Human Mind," Part III, Chapter VIII.

¹⁵Spalding's article on "Instinct" in Macmillan's Magazine, February, 1873.

¹⁶Kant says that "the objective existence of things is the condition of our internal experience." As Reason is also a part of our internal experience, it seems to be grounded in an intuitive reaction of the psychical faculties in response to impressions from without.

reason consciously would be liable to disturb the nervous equilibrium and mar the exercise.

This peculiarity of the combined physical and mental activity is still further seen in the familiar fact that natural ability or skill is not the product of education. As an old author expressed it in Latin, *Poeta nascitur, non fit*. It is equally true for many other callings besides that of the poet, that to succeed in them one must be born with an intuitive bent in that direction.¹⁷ Therefore, it is clear that the Mind does not wholly depend upon deliberation; but all our mental processes have a dark side, so to speak, of unconsciousness, which is a sort of elemental undercurrent, out of which continually arise new thoughts and creations of the mind; back into which our countless waves of emotion and volition sink again to rest. This might well be called the "mother" element of the soul,¹⁸ for it is the region of mind where conscious thought is mingled and lost in the deep tide of Life. There are many theories concerning this aspect of the mind, some of them exceedingly chimerical; but we shall content ourselves by observing merely that the border land between instinct and conscious reason is still a fascinating territory to explore.¹⁹

¹⁷Goethe considered that no man was a writer "who had to think in order to think." Gervinus's "National Litteratur der Deutschen," Volume V, page 122.

¹⁸Cf. Goethe's "Die Muetter," in "Faust."

¹⁹Siāis's "The Psychology of Suggestion," Part II.

Since in many respects we are so similar to the lower creatures, and yet, for the most part, we now find ourselves in a comparatively clear and consecutive series of mental states, one may ask, How is it that we have come out of the childish state, scarcely above the animals, into the present one? What is the essential difference between the animal and the man in full possession of his faculties? We may safely assume that it consists not merely in the nervous organization, nor in the size of the brain, nor in the gift of language, although each of these is very important. But the real difference is in the power of attaining to and utilizing mental concepts or abstract ideas. The number, range, clearness, and subtlety of one's concepts mark the grade of his mental powers, and, in a sense, of his development in life's scale.

THE BEGINNINGS OF REASON.

Now the concept is a mental image, arising in the first place out of an *impression* on the mind through the sense-perceptions, or through a number of such impressions in series or groups. To these impressions made upon the mind is joined the reflex action of the mind itself in a certain correlation with each and all of these impressions.²⁰ The nature of this correlation we will not consider just now; but we observe that as these impressions are repeated,

²⁰This is closely akin to simple perception.

there arises in the mind a double series of mental reactions leading to concepts. One of these reactions is the *comparison* of unlike impressions, as being agreeable or unpleasant, sharp or faint, warm or cold, and so on; while the other reaction is the *association* of similar or simultaneous impressions in such a sense that each one of the series or group serves to recall the others of the same series or group to our consciousness.

As yet we have not inquired what consciousness is, nor are we supposed to be aware of any such thing as consciousness at all; still it is tolerably clear that these simplest mental reactions call for an incipient power of representation and of memory, and that they also imply the first traces of mental habit. Where these are, we certainly can not deny consciousness, however difficult may be its definition. As such impressions and reactions are multiplied, there presently arises a more definite mental process from the vestiges of impressions remaining in the mind itself, apart from the senses. These are now gradually developed²¹ into new forms and combinations by purely mental activity, which is re-enforced by new impressions, and grows in strength by exercise.

This mental process includes two or three stages.

²¹Any general and vague apprehension of a definite truth may be called a "notion." But the term is often applied to definite concepts.

One of the most primary mental acts is that of *recognition*,²² as when the infant recognizes its nurse or mother by the same agreeable voice or feature noticed before and becoming familiar. The same action is gradually extended to other objects near at hand, and so continues on through days, and years, and life. These objects and their reactions may become a basis for the *appreciation* of things as desirable or otherwise, important or trivial, and so on; but it is still a long way in experience before we begin to appreciate anything as good or bad, true or false, excellent or contemptible.²³ One necessary condition for all these stages or elements of mental activity is *attention*,²⁴ a state of consciousness that arises when the mind is prompted, aroused, or attracted by a lively or unusual impression, so as to hold its action to the same object, or series of objects, for a time, and thereby induce an unconscious process leading to a flow of concepts, which, when connected in definite relations, is called *Thought*.²⁵ With this comes necessarily *self-consciousness*, for that is essentially the thought of one's self. But this is a long way beyond mere appreciation, and is probably about as far as the ani-

²²Recognition is very closely allied to apprehension; i. e., Memory and Perception are both concerned in it.

²³All appreciation comes by exercise of judgment.

²⁴Wundt's "Human and Animal Psychology," Lecture XVII.

²⁵Hume's "Inquiry Concerning Human Understanding." Also, James's "Psychology," Volume I, pages 224-291.

mal ever gets, if indeed it is not beyond him. The utter lack of *language* to fix his concepts is a bar to his further progress.

Yet the human mind is usually quite irregular in its activity. The continuity of Thought is frequently broken off by some new object, or by lack of material for concepts, or by sleep, or by excitement, or by sheer weariness. The most of us are content to enjoy a few "lucid intervals," when the mind is clear and strong, and when we are able to think as we ought to think. Only the trained minds are able to do constant work, and even they are subject to great irregularity. Then also, thought may take on various phases, as dreams, reverie, conscious or unconscious attention. But as already intimated, pure thought may nearly always be connected with Attention, a state of mental poise and concentration,²⁶ usually accompanied by *emotion* in the form of interest in the subject of thought, without which attention is sure to lag and thought becomes dull. With a lively interest, however, the operations of thought on any fruitful subject will surely result in new concepts, judgments, views, and fresh trains of thought, coming faster or slower, always according to the mental vigor and the material at hand.²⁷ In the long run, the work of one's

²⁶Ladd's "Outlines of Descriptive Psychology," pages 37, 43.

²⁷The so-called principle of "Accommodation" is only a negative element in mind; like the pebbles or stones in the way of a brook. They merely modify the current's course.

thought is to manage his affairs, to form his character, and to arrive at some views of truth that shall satisfy his natural inquiries.

INTUITION.

After all this has been said, the question still remains, How do we know that we know anything? Notwithstanding the many interesting facts that have been elicited by the promoters of the "New Psychology," yet as to *how the mind is competent to act* in attention, recognition, and appreciation, so as to become the birthplace of concepts, judgments, purposes, and trains of thought, we know as much or as little from a physical point of view as we do of the power in the shapeless mass of jelly called an *amoeba*, absolutely without any organs, to extemporize a mouth when food is presented, to inclose the food and digest it, meanwhile increasing its own size and mass.²⁸ But the *amoeba* possesses this power because it is *alive*; and in like manner the mind has a power to lay hold, not of mere matter, but of impressions, of actualities, and of abstract truths, and to deal with them as if they were substantial, so to speak, because it also is alive. This power of the mind, so far as it relates to the perception of truth, we call Intuition, because it can be likened to an inner vision, although it really underlies all the faculties.²⁹

²⁸Packard's "Zoology," page 17.

²⁹Harris's "Philosophical Basis of Theism," pages 121-157.

All the mental activities discussed above are processes that defy any ultimate analysis. We can only say at last that this or that *seems* to be one or more than one, the same or not the same, great or small, simple or complex, related or unrelated, true or false, good or bad, pleasant or repulsive; and this word *seems* is used to signify that we *see* the matter so, or *feel* it so, or *sense* it so, in the mind. Under this impression, we believe the matter *is* so, unless we have been misled from some cause.³⁰ We may appeal to Consciousness to make sure that we are wide awake, and we may compare this impression of fact or perception of truth with a former one of similar character. If these harmonize, and if communication with other persons assures us that they see the case just as we do, we conclude that we were right, at least until new light dawns on our minds. But ordinarily we and all other men accept the results of Intuition without a question, if they are obtained under normal conditions.³¹ The only corrective for Intuition is Intuition.³² We are not arguing against the various powers of the mind as apparent in its complex activities, and as set forth in numerous works on Psychology, nor against the utility of logical demonstration. On the contrary, we accept

³⁰So a pupil who is endeavoring to understand a problem may say, "I do not see it," or, "I can not see it," but finally he will say, "I see it now."

³¹Appendix. Note 4.

³²This appears to be the same idea that is sometimes called "primary inference," or what Kant styled "pure reason."

them, as will be seen further on in this work. But we are now considering merely "*the power of the mind to become conscious of truth*" when the proper occasion for it is present.³³ Minds vary in this power quite as much as our bodies vary in health or strength. When Intuition is strong, we call it insight, sagacity, talent, or even genius; but its characteristic always remains the same in seeing the truth simply because it *can* see it, and in so doing from *an inward sufficiency*. This does not exclude sensory apparatus, nor brain, nor experience, nor mental exercise as a means of attaining to greater power in this direction;³⁴ yet in all these cases, *the power to see mentally remains as inscrutable as before*. However, in some instances it is known to fail, as in serious nervous disease or in old age, although it often continues strong to the last.³⁵

We have already noted the fact that all mental operations are greatly facilitated by *language*,³⁶ which furnishes ready-made symbols as a vehicle of expression for our concepts, and as a means of definition, comparison, and communication; although language also is a product of mental evolution, extending through many generations of living men, and gradually developing to meet the requirements

³³Leibnitz's Definition of Intuition.

³⁴Locke's "Essay on 'The Human Understanding,'" "passim.

³⁵The ability to see as others see, and to distinguish ordinary facts from fancies is the criterion of sanity as against insanity.

³⁶Drummond's "Ascent of Man," Chapter V.

of riper modes of thought and a more complex society.

Yet there is something far deeper than language involved in every mental action, namely, *the power to use language*. For instance, when we recall a lost impression with some effort, or utter a truth that is realized for the first time, or solve a mechanical problem quite unconsciously, what is that which goes on in the mind? Where do the concepts or ideas come from, and how are they symbolized in language? Are not the correlating, integrating, and originating powers of the human mind quite beyond the limits of mechanical explanation? Are not the fact of consciousness, the power of abstract reasoning, the sense of purpose and personality, of a different order from mere physical phenomena? It is true the "New Psychology" has demonstrated an amazing detail of sympathy and mutual reaction between the mind and body in reference to all mental activity, but it has not thereby identified the mind with the body nor with physical phenomena.³⁷

At any rate, common observation shows us that even a living human body can exist without a conscious mind. A drug or an injury causing severe nervous shock often affords the demonstration. But aside from such considerations, it is plain that mental phenomena as contrasted with physical phenomena constitute a wholly new order, incommensurate

³⁷Bowne's "Review of Herbert Spencer," pages 109-111.

with the latter. Out of Mind arises a power that is supra-physical, because, while it is not geometrical, nor chemical, nor kinetic, it is far greater than any of these in being competent to direct or master them through an apprehension of abstract relations.

CORRELATION OF BODY AND MIND.

So far as concerns our present state of existence, it is certain that one's power of thought is almost wholly dependent upon the health, integrity, and relative power of his brain and nervous system. These constitute a very intricate and astonishing physical machine, with tendencies of mental action and reaction in close harmony with the outward indications of temperament. We know, also, that the working powers of the mind, as attention, recognition, memory, speech, judgment, and self-control are conditioned upon the physical state of various portions of the brain. But it is still at least an open question whether the mental effects of lesion or disease of the brain and nervous system are not to be accounted for as mere inhibitions, nuances, and mental obfuscations, or even as the result of reflex nervous irritation with confusing and vitiating influences upon the actual processes of mental action. For we observe in many instances a no less striking influence of the mind upon the physical organism. Anxiety disturbs health, while confidence promotes

it. Fear relaxes the muscles, while anger often makes them exceedingly tense; and the whole course of physical welfare is largely determined by the conditions of mental prudence and satisfaction in the relations of life.³⁸

That any mechanical or physical explanation of mental phenomena falls far short of accounting for the facts involved, we shall see also from the following considerations, which are only an outline:

Knowledge is more than sensation, which might be regarded as mere nervous reaction. It includes perception, apprehension or recognition, and appreciation or consideration, both of concrete things and of abstract relations.

Memory is more than a sort of brain photography, as some have conceived it. It includes the power to select and call up any particular fact or thought that has been known previously.

Reason is more than a mere computing operation, to which it has been sometimes compared. It includes the voluntary investigation of subjects, and even the creation of new concepts of great complexity.

Purpose is more than mere Will, which might be looked upon as only an impulse of the physical life. It includes plan, foresight, and the use of means suitable to accomplish a given end, so that progress is made upon purely mental grounds.

³⁸Appendix. Note 5.

Mind is more than mere Consciousness, which some have reduced to a term for the totality of our mental states. It includes self-consciousness, with the power to inquire concerning our existence, What, whence, and why am I?

These supra-physical endowments are found fully developed in Man alone among living creatures in this visible world, and it is only through them that the philosopher can hope to bring the realm of ideas and principles into touch with the realities of common experience.

THE MENTAL POWERS.

We have said before that Intuition somehow underlies or validates all the activities of the mind, but this does not render a classification of the mental faculties impossible. We all understand that to know is to be aware of some thing or fact; but that is a sort of *perception*. Then it is also to take note of something; and that is an act more or less of our own *choice*. In the third place, we know nothing in the proper sense of the word without an assurance of some kind; and that comes by the exercise of *judgment*. Thus knowledge, or even the feeblest ray of thought, involves all three sides of mental activity that are commonly called faculties, viz.: Will, Sensibility, and Intellect;³⁹ and these become

³⁹Porter's "Human Intellect." Hoeffding prefers to call them *feeling, cognition, and will*.

known to us by self-consciousness in the three phases of attention, apprehension, and appreciation. We do not mean to say, however, that these or other definite phases of mentality can be identified wholly with one or another of the faculties. On the contrary, all the faculties are usually blended in action, and this must be constantly understood.

Perhaps the most important and most primitive phase is *attention*,⁴⁰ and concerning this we may notice further that it has a variety of degrees of manifestation. One of these is exemplified when we are reading a book or listening to an address. In either of these cases the course of thought may be followed by the mind, which is at times merely acting as it is acted upon, like an automaton. This is *pure* attention, since the will is almost wholly given over to one thing, and perception is open only in a single direction. In extreme cases, this kind of attention becomes "rapt," and may pass over either into a state of extraordinary mental perception and creative power, such as that experienced by the poet, the orator, and the artist, or into the trance state of hypnotism, which is akin to somnambulism.⁴¹ This last state is also characteristic of "absent-minded" people, and of persons who are easily influenced by persuasion.

Again, in conversation, or in business, or in many

⁴⁰Sully's "The Human Mind," Volume I, Chapter II.

⁴¹Sidis's "Psychology of Suggestion."

kinds of personal exertion, there is both a receptive and a positive action of the mind going forward at the same time, giving rise to new concepts and turns of thought at every step of a complicated exercise. This is *alert* attention, and calls all the faculties into united action, leading on to clear apprehension and the most varied appreciation, with a constant view to definite results. A third case is the critical exercise of the mind upon its own action or object of thought, as when noting what is concrete and what is abstract, what is normal and what is unsound. This is *introspection or analysis*, and sometimes is great in power and results.

That the mind is capable of such reflexive action is doubtless known to every person; yet there are but few who have developed this power to any considerable or remarkable extent. The ability to think successfully and to attain to a mastery of any subject of whatever nature is dependent upon environment, stimulus, and long-continued practice. The longer one lives and thinks, the more he always finds to learn, for the materials around him are inexhaustible. But each man should cultivate his mind with some reference to his occupation in life. Not all have need of the same faculties or knowledge, yet each has frequent need of all his mental powers. In many situations a strong will or a vivid imagination can do more service than the keenest

intellect;⁴² but no sensible man will leave his wits at home when he goes out to meet the emergencies that are always incident to the conflicts and duties of Life.

It must be remembered, finally, that the latent mental powers of each successive generation depend largely for their proper development upon the help of language, schools, and social conditions of a high grade. It is only with such aids that individuals attain to intelligence and culture, and that the manifold interests of civilized society are maintained; while without them the finest abilities of persons and communities are often left quite undeveloped. Since most men come to be what they are by virtue chiefly of their environment, with its traditions, its daily associations, its social forces and ideals, it is evident that a serious responsibility must rest upon the few whose leisure, talents, and training have placed them in a position that is more or less above mere environment, where they become the natural leaders of their fellow-men in political, social, or religious life.

⁴²We shall have more to say about Reason and Will at the close of the next chapter.

III

REALITY

ALL men live between two spheres of being, an inner and an outer world. One poet sings, "My mind to me a kingdom is;" and many a man often finds the most delightful company in communing with his own thoughts. The mental gaze of another class of persons is almost constantly fixed upon the affairs of the outer world in their various occupations, so that they scarcely notice the inner world at all. Yet some thinkers doubt the reality of the one or the other, or even of both these worlds. To clear this matter up we must undertake a little metaphysics.

What is Reality? Of what is the soul conscious? Is the soul conscious of anything real at all? These questions may seem absurd to the practical mind; but they also suggest the persuasion that, while, so far as thought goes, Reality begins in Consciousness, it does not end there. For it is but a step in mental experience from our Consciousness to Self-Consciousness of Perception, that is, through inference from sense-perceptions of the existence of external things.

Upon the awaking of Sensibility and Intellect in us, Being is first revealed as a consciousness modified by Sensations which are impressed upon us from a point or source external to ourselves.¹ We are presently able by comparison of such experiences to distinguish Being as Ego and non-Ego, together with somewhat that is common to both, namely, the notion of Reality.² Now Reality implies a limitation of Being, in contrast with not-Being; because the apprehension of Reality comes to us in observing that as mental concepts multiply, some of these have corresponding sense-perceptions, while others have no such correspondences, however clear they may be in the mind.³ Thus we may contemplate Being as either Real or Ideal; and since many of our concepts are not readily brought to the test of experience, there arises another view of Being as Possible, that may or may not be Real.

Still holding our attention for the present to Reality, we discover the first evidences of it in sense-perception, as the sight of a house, the sound of music, the taste of salt. Again we find it in repeated experiences, as awaking from sleep, returning from a journey, the contrasts of heat and cold, light and

¹See Kuno Fischer on Des Cartes in "History of Philosophy," pages 337-344.

²There is also a power to distinguish to some extent between body and mind within the first or general Ego, and between the Past and Present.

³Martineau's "Study of Religion," Volume I, page 206.

darkness, hunger and food, or in the notation of tests in a laboratory designed for that purpose. In fact, all the ordinary experiences of life have impressed upon us the notion of Reality long before we have arrived at the stage of introspection, and it is a conviction that can not subsequently be shaken off. Finally, we observe Reality in a calm and repeated analysis of our experiences, which tends to show that many of these depend upon things or circumstances that actually *are*, or have been in existence, regardless of our perceptions of them. Thus we constantly distinguish between mere words and facts, a portrait and the person represented, a dream and an actual experience, a supposition and a verified truth or principle.

Yet what we have obtained as the result of these experiences and analyses is Truth rather than Reality, since the latter can not go out of itself into our minds. Truth is only the mental impression of what we perceive, but we are assured of the Reality by the Truth that we possess. The latter may, indeed, go far beyond the Reality and become abstract, by including the relations, principles, and generalizations in which the Reality exists, and which run through the entire Universe. These generalizations are the "*Universals*" of the Schoolmen, which many have mistakenly held to be in fact the only Reality. The Reality as *seen* in the midst of this penumbra or halo of Truth constitutes pure Ideality, or the

images of things as conceived in the Mind; although this in no wise sets aside Reality as existing *per se*. The co-ordination of thought and experience at every moment assures us that both are valid. Of course the term Reality is here used in a specific sense.⁴

Has a concept reality? Yes, as a concept; but not in the sense of Reality that is strictly objective to the Mind. It exists as an image or impression in the mind, requiring the mind as a condition of its own existence, even when it is a perception or reflection of some object external to the mind. But what shall we say if the concept is an abstract truth, such as a proposition in geometry, a law of motion, a standard of beauty, or of goodness, or of excellence? We answer, Truth is always true; but it is not a reality unless it exists in a concrete form as an element of objective existence. The concepts of Truth arise in the mind, and disappear or recur as the mind either is affected by the contingencies of experience, or is self-directed in its activities. But the special ground and occasion of the concept or idea is in the nature of the mind itself as acting and being acted upon. The uniformity of the mind in conceiving certain kinds of Truth is not a proof of the objective existence of such Truth; but is merely a proof of the mind's consistency with itself and with other minds. The nature of the mind con-

⁴See Bowne's "Metaphysics," pages 27, 28.

stitutes the law of the mind, and is one element of its own existence. We can see that when law is gone from the mind, the mind itself has gone; although this is never entirely the case except in total unconsciousness, or death of the body.

ELEMENTS OF REALITY.

We have already said enough to imply our conviction that there is no real Being apart from Reality. The elements of Being are therefore represented by the various concepts which co-exist in the concept of Reality; and these elements are usually three in number, viz.: Substance, Energy, and Law; or in other terms, things, phenomena, and mode. Some would limit Reality to things alone; but if there are phenomena, such as form, weight, color, temperature, these are either real or unreal. If they are unreal, there is no need to take any account of them. But if they are real, then affirmations can as well be made of them in respect to Being as of the thing itself; hence they are an element of Being. Again, if there is mode in the objective things—and where is there not?—the same dilemma applies to this mode as to the phenomena above considered. If it be true that the mode exists, it is real; but if it be not real, then it is not true that the mode or law exists. Hence we may say with perfect assurance that the mode or law of its existence is an essential element of all

Being. From this it will be seen that we entirely reject the old notion of Substance and Attribute as untenable in this connection. The proper notion is merely of the Elements of Being, or of Reality, or Actuality, or Modality; and we have just elaborated them concisely according to the demands of logic.⁵

For aught we know, there may be various kinds of Substance; but of one kind we are reasonably sure, and that is Matter.⁶ So much has been speciously put forth in regard to the supposed unreality of matter that a few words on that point may not be out of place. We maintain that Matter, as at least one phase of Substance, is just as real as Energy,⁷ and *vice versa*. Also we maintain that the two elements may be separately identified. All attempts to explain away matter as constituted of mere nodes or vortices of energy,⁸ or a combination of mere attributes, must fail.⁹ Our reasons for this position are these: All Energy must be either kinetic or static; that is, it must exist either as motion or as inertia, and each of these may pass into the other. Now, when Energy is kinetic, regardless of its mode of manifestation, whether as heat, light, electricity, mass motion, or chemical reaction, we must inquire,

⁵Comp. Lotze's "Metaphysics," Book I, Chapters I-III.

⁶Appendix. Note 6.

⁷I. e., in this case, physical energy.

⁸If vortices in the Ether are assumed, then Ether becomes the underlying substance.

⁹See Schopenhauer's view in "The World as Idea," translation of Haldane and Kemp, page 10.

What is *that which moves* in this display of energy? Even in the subtlest of its forms, kinetic Energy always reduces to some kind of motion, however rapid and delicate. Or, on the other hand, let the Energy be static, in the form of Inertia which requires Energy to be overcome, then, What is *that which stands still*? We can not say it is vibration that vibrates, or motion that moves, or immobility that stands still. All such phrasing only ends in pure absurdity. Therefore we stand upon the proposition that Substance, whether we call it matter or anything else, is inseparable from Energy in all of its manifestations,¹⁰ yes, even in its inmost existence.

But we can also distinguish between Matter and Energy by a careful determination of each in its essential characteristics. The characteristics of Matter are form, mass, and density. Apart from these, Matter is not conceivable to the mind; but with them it is conceivable, and it thus constitutes a prime element of Reality. The characteristics of Energy are equally clear with those of Matter. They are field, direction, and intensity. Without these Energy is inconceivable, unless it be as will-power¹¹ in the Mind. But to have the will is not always to have

¹⁰The same course of reasoning will apply to the Ether, which is that which transmits energy in the regions of interstellar space. Also the Mind or soul is that which is conscious in feeling, knowing, willing, and the like.

¹¹Schopenhauer's leading idea: "Das Welt als Wille und Vorstellung."

the power; hence will and physical energy are not mutually convertible terms. Neither are matter and energy mutually convertible into each other. The characteristics of the one can not be asserted of the other. Moreover, no application of energy has ever been known either to increase or decrease the mass or the quantity of any given matter. Neither heat, nor light, nor electricity can do this, nor do the phenomena of life form any exception to this law or principle of limitation. The Conservation of Energy is one of the most settled doctrines of modern Science, and yet Matter is not one whit less indestructible than Energy, as every student of Chemistry well knows.¹²

A similar line of argument will show that Law also is doubtless an element of Reality. The law of being as applied to any thing is its mode of being; that is, its *nature*. Thus, it is the law or mode of its being that differentiates a piece of iron, a stream of water, a book, a man, a state, from other things, and makes each of them to be *what* it actually is as an object of knowledge. The most general characteristic of Law is Causation, which includes such notions as origin, continuity, development, proportion, harmony, and limitation. It is evident that each and every instance of Law must include a Cause and an Effect. These are not merely a relation of sequence, like day and night which follow each other by a mere suc-

¹²Popular Science Monthly, March, 1901.

cession ; but they express a relation of strict dependence, as when a ship is wafted by the wind, water boils by the action of fire, a man is made angry by abuse, wages are raised on account of a scarcity of labor, or a person is killed by a fall from a window upon the pavement. In every case, if the event is real, since the cause is part of the event it must also be real, and likewise the effect must be real ; although perhaps some would prefer to call the existence of law mere modality, that of energy mere actuality, and that of substance only reality. For our part, we believe that nothing can be gained by any such distinctions, and that it is better to class them all under Reality. We observe also that each Effect becomes a new Cause of something else in a continued course with varying relations between the Realities concerned. Consequently, causes are complex, and more or less immediate or remote, so that the search for final or ultimate causes is one of the most interesting matters in philosophy. It is virtually a search for the origin of Law by the light of Reason, a difficult task, but not an impossible one.¹³

We have not yet mentioned the place of Life in this analysis of Reality. Life can not be identified with substance, energy, or law. They are constant, persistent, and universal, while Life is inconstant and often extremely dependent upon the physical environment for its manifestations. Yet

¹³Vide Janet's "Final Causes."

Life is undoubtedly real, and is higher in its characteristics than mere substance, energy, and law. Rising from the most primitive forms through the various stages of growth, sensibility, and consciousness into mind itself, it appears to be a distinct and *fourth* element in Reality, changing the properties, transposing the processes, evading many laws of the physical world, and constituting new forms, forces, and laws of its own. We have already seen that it is the one and only originating, organizing, and progressive element; and as such it enfolds and unfolds all other existences, embracing and appropriating everything else in its own development and operation. In its highest manifestation as mind, it even attains to self-consciousness of its own being, and the possibilities of concept, query, and purpose.

SPACE AND TIME.

Another mooted point in the discussion of Reality is that of Space and Time. Space includes the notions of extension, motion, and locality. Time includes the ideas of duration, succession, and progress. Taken together they furnish the means of comparison and of measure for all physical phenomena. Some take Time to be the basis of Number, and Space the basis of Geometry. We should prefer to call them the ordinate and abscissa of existence. However that may be, even a thinking mind must be somewhere, and to think requires time.

Therefore, Mind, so far as we know it, is not wholly independent of Time and Space, however far Thought may transcend them in referring to past or future events and distant things. But because of this transcendence many deny that Space and Time have any objective Reality, and some even consider the ability to grasp this view as one of the distinctive marks of a philosophic mind.

Let us see. Suppose a nugget of gold is found in a quartz vein where it had existed for long ages. Now, was the nugget in the quartz before it was found, seen, and known by the miner? Was it anywhere? Was it a nugget, having definite form, dimensions, and weight? The answer to these questions must indicate that the *where* of the nugget was as real before it was found as afterward, and upon that *where* depended its discovery by an intelligent agent. Suppose again that a clock is set to give an alarm at an early hour of the morning. Its owner lies down and goes to sleep, depending upon the clock to awaken him. While asleep, he does not think of the clock, nor is he conscious of the lapse of time. Is Time, therefore, as measured by the pendulum and hands of the clock, standing still or going on? If it is standing still, or really non-existent, the owner may sleep longer than Rip Van Winkle did before he is aroused by the alarm. Therefore, if Space and Time have no objective reality, all the operations of Mechanics, Commerce,

Trade, and even of Agriculture, are based upon an illusion. But Nature itself contributes to the evidence against such an illusion, since an eclipse of the sun and moon can be foretold; that is, it can be calculated, and so predicted by an astronomer. Here are Substance, Energy, and Law combined in a phenomenon that is strictly measured by Space and Time. If Space and Time are not real, is the eclipse real? Are not all the elements of the eclipse real? To believe that they are real is the only rational position. If Space and Time are not real, then History may as well run backward as forward, and a man will not be able to distinguish his right hand from his left in putting on his gloves. But we are sure that such conceptions are always absurd. If it be maintained by some that Space and Time are only relative terms, we shall not demur, since Relation is inseparable from Reality, so far as we apprehend it. But some one will say, Space and Time are not "things in themselves," hence they are not real. Well, what are "things in themselves?" Kant himself could not tell, nor can any one else.¹⁴ In our opinion, the difficulty with those thinkers is that they take too narrow a view of Reality, in trying to simplify objects that are essentially complex, and they fail because this is impossible. If Substance can not

¹⁴For the relation of this inquiry to Agnosticism, see Rogers' "Modern Philosophy," page 155. Also his chapter on "Agnosticism," etc.

exist without Energy and Law, one is as truly real as the other; Life and Mind and Thought are also real; while Space and Time are at least inherent conditions or principles of Reality,¹⁵ and are, therefore, in some sense essential to Reality.

REASON AND CERTITUDE.

The general operations of mind, as developed in Space and Time, are commonly called reasoning. In the simpler forms of reasoning, assertion is a very prominent feature. Our concepts, notions, or ideas are set forth singly and in various relations with all the forms of syllogistic argument,¹⁶ according to the data and the nature of the case. Things are said to be or not to be. They are more or less, like or unlike, related or unrelated, inclusive or exclusive, in whole or in part, true or untrue, and so on. All this is very short and direct; although by division, transference, and fresh combinations of the matter under consideration, the argument may become elaborate and present great beauty as well as strength. Yet we find an early limit to deduction, unless it be in the higher mathematics,¹⁷ and even

¹⁵See Morris' Kant's "Critique of Pure Reason," Chapter II. But this agrees with Hartmann's view exactly; also with Schleiermacher's view. Ueberweg's "History of Philosophy," Volume II, pages 244, 251.

¹⁶See Appendix. Note 7.

¹⁷Schopenhauer's "Third Root of Sufficient Reason."

there it often leads to absurdities.¹⁸ Much of our present-day philosophy is of just this sort. We must remember, too, that half-truths are extremely deceptive.¹⁹ Logic itself is sometimes overestimated. It is altogether powerless to reveal truth, except in and by the faculties of a living mind. We shall do well to observe that every step in a process of pure deductive reasoning is of an intuitive nature. We perceive each successive step as it comes up in the mind, but we can not tell how, nor why, nor whence it came to us. Therefore we may justly say that deductive reasoning is only Intuition proceeding in a logical or definite order.

But there is a higher form of reasoning which is not so direct nor self-assertive. It takes note of, not an absolute thing or fact, or principle, or relation, but the *indications* of such a thing or fact. The examples of a principle or the converging lines of a law are taken as a ground of hypothesis for some reality that is not actually perceived. Yet the completeness of such a reality may be recognized by the mind as possible, or as probable, or as being surely indicated by sufficient data, like the full circle indicated by the crescent moon in the evening sky, or like the message indicated by a few dots and dashes

¹⁸E. g., Kant's "Antinomies." Also many fundamental notions of German philosophers; as the Identity of the Ego and the non-Ego, or the dictum that Being is equivalent to not-Being.

¹⁹Appendix. Note 8.

on a strip of paper, upon which may hang issues of life and death. This we commonly call Inference, or inductive reasoning, and it is one of the greatest instruments of investigation in both Science and Philosophy. Yet it requires the presence of Intuition no less than Deduction. Rather, it is Intuition proceeding in a larger and freer way than before. Each Inference is an hypothesis that meets the apparent requirements of a problem, that supplies an element, or elements, previously unknown, in such wise as renders all the given elements harmonious to our apprehension. We can not refer such a solution to Imagination, because that is incompetent to discover new truth without a guide of some kind, and we know no better name for the guide than Intuition. The power to create new concepts, and to reason by ready and correct inference is the chief characteristic of mental originality, and to a certain extent of mental strength. This is as often found outside of the schools as in them, perhaps because such people are less apt to be trammeled by the beaten paths of training. Familiar examples are seen in Napoleon, Shakespeare, Lincoln, Edison, and many other celebrities. Yet these men have owed much indirectly to schools and learning, whose ready-made advantages they appropriated in a large degree, and by which their own deficiencies were made good in the final outcome.

True, we may well confess that *absolute* cer-

tainty or knowledge, in the strictest sense of those words, does not exist among men. Our senses, our faculties, our environment are all too unreliable and changeable for that.²⁰ Yet we may be *practically* certain in regard to almost any object of inquiry, if we can only find the sufficient data. No doubt there are those who will still deny the reality or reliability of any outward experience, even though this should carry them into the misty realms of pure phenomenology. They will maintain that we know nothing absolutely but that which is in our Consciousness. They prefer to take the world around us as a panorama, a shifting scene, a moving picture, an empty dream, which is or seems to be for the moment, and then vanishes, leaving only our personal identity as the one sole abiding Reality of which we are sure.²¹

Probably there is to some people a certain seductiveness in this view of Reality; but why not take the opposite view? Let the Mind or conscious Soul be like a bubble floating on the surface of a stream, wherein the earth and sea and sky, the trees and flowers and living creatures, or even sounds and words, are impressed for a moment so deeply that it is filled with a sense of these Realities. But they were there before the bubble had an existence, and there they will remain, although when the bubble has burst, the impressions but lately felt will vanish

²⁰Balfour's "Defense of Philosophic Doubt."

²¹Berkeley's view.

forever. Let us suppose, again, that the bubble could continue forever. We may view this also as a possibility to be discussed further on, since Reality, Ideality, and Change do not exclude one another.²²

CONCEPTS, WILL, AND REALITY.

There is another point bearing on this very matter that is not without significance. As we said, some way back, the Truth is greater than Reality, and Truth is in the Mind. Now the Mind does not only *see* by Intuition. It also discerns, it compares, it appreciates, it generalizes; nay, it remembers the past, it forecasts the future, it infers what is unseen, it brings forth new conceptions of Truth; and by Will, it turns many of these conceptions into Reality.²³ This is but the practical side of Life, since we see men doing these things every day. Therefore, in a limited sense, Reality itself may depend upon the human Will. How limited or how great this influence of Will is we may learn from history, from the deeds and changes wrought by individual men, the cities and empires founded, the elements and forces of Nature subdued, the Earth itself "modified by human action," its most distant quar-

²²Comp. Schelling's later views.

²³In another view, many concepts that are purely products of the Imagination may be treated as real; and thus the Mind may move in a simulated world, as poetry, fiction, the drama, etc. It is often difficult to perceive clearly the dividing line between the Real and the Ideal, especially when that line is being changed constantly by realizing the Ideal through Will.

ters bound together by cable and commerce, its secrets wrested from the deepest hold and turned to practical account.

But there are some things that Will can not do. It can not destroy any part of substance, or of energy, or of natural law. Yet it may so direct the energies of the body it inhabits, it can so plan by the faculties with which it is associated in Mind, as to change its own environment, to take away or add to the resources of food, shelter, comfort, or a thousand things that make up the sum of sense and knowledge. Thus the Soul imparts some reflection of its own qualities to the material world. It throws a peculiar atmosphere about the most familiar scenes. It creates a new world of thought, of art, of society, and of institutions.²⁴ By reflex action, it even builds its own character through discipline, study, association, and religious faith. Perhaps it will not be strange, therefore, if the Soul should come to read some day in the lineaments of Nature the traces of a Power and an Intelligence that are infinitely beyond itself, yet not wholly unlike it in certain qualities of Being, and certainly not below it in conscious Personality.²⁵

²⁴President Hyde's "Practical Idealism."

²⁵This section appears to cover the ground of Fichte's system of philosophy, or "Wissenschaftslehre."

IV

CONSISTENCY

SOME one has said that the most wonderful fact in the universe is the perfect response which the human soul makes to its environment. The pebble makes no such response, nor even the grass or the trees, nor yet the creatures of the field or wood; although these last are vastly more responsive than the pebble. But the connections between the soul and its environment are not easy to establish. Mind alone is competent to detect the operations of Mind; therefore, we must ask indulgence for another "go" at Metaphysics.

THE GENETIC PLAN.

We now take up the co-ordination of Mind and Being as they actually exist under the synthetic power of Life, and we soon find that this synthesis, which is constant in our experience, is also a genesis, both in the physical world and in the province of Ideas. Yet a genetic plan is difficult to make out, since the rise of Intellect from the formless basis of Intuition is almost as deep in mystery as the rise

of an oak from the pip and pulp of an acorn.¹ But the fact of the rise is plain in either case; and as we can discern the roots, the branches, and the trunk of the great tree, with their vital parts, so, perhaps, we may discover the primary concepts of the Mind in their various aspects as subjective, objective, and reciprocative,² along with the constituent elements of their existence. We shall not use the term "concept" in precisely its usual acceptation, but will limit it for the present to Ideas of a certain order. A concept is an Idea, or a form of Truth; and as such, it is essential to the processes of Thought, since Thought consists of trains of concepts.³ But concepts of the first order, as here assumed, are composite, and arise from the union of a lower order of concepts which may be called principles of Truth.⁴ Like the Truth itself, these principles are more comprehensive than Reality, and should be recognized as the conditions of reasoning, as they are also of mere existence. We shall discuss their original, inherent character and correlation further on; but now observe only that they unite in pairs to form concepts, as shown in our genetic scheme given be-

¹The "New Psychology" sheds no light upon the real inwardness of our consciousness in mental activity.

²Comp. Fichte's "thesis, antithesis, and synthesis." These principles may be the explanation of a certain tendency to three-foldness in philosophy, as in these pages.

³Wundt's "Human and Animal Psychology," Section XX.

⁴Sometimes these principles of Truth are called the "Form elements" of Thought.

low. These principles may well be termed “categories” of the concepts, since the entire content of each concept falls under one or the other of its two principles; and upon this point, suitably defined, the logical value of each concept depends. Opposed to each primary concept in the table is another concept which we call the correlate, because it represents in a general way the outcome of the primary concept as known by actual experience.

This genetic scheme, in our judgment, represents the order and mental relations of the primary activities of the mind far more adequately and practically than other schemes which have been formulated heretofore. But the chief value of this plan is to show at a glance the general rectitude and consistency of our doctrines concerning Reality and the processes of mental action. After all, the real demonstration of any system of Truth must consist in so presenting it that it can be perceived *intuitively*.

We may now take up and define the various aspects⁵ of the primary concepts with reference to the Ego, by which is understood a living Mind, such as we know ourselves to be by all possible tests, and which is a necessary assumption in any analysis.

First is Perception, arising out of experience as Sensation, viewed either on its physical side as a nervous reaction, or on the mental side as an act of

⁵An “aspect” is the special relation or view in which any objective reality is presented to the mind.

GENETIC SCHEME.

Aspect.	Concept.	Category.	Correlate.
Objective	Perception	Pleasure	Sensibility and Plain Representation
Law	Judgment	True	Intellect and Memory
	Choice	False	Will and Character
		Good	Real
		Evil	Ideal
			Mind
			Thought
			{ Absolute Relative }
			Reason
Reciprocatice,	Substance	Accident	
		Essence	Body
	Energy	Change	
		State	Power
	Cause	Cause	
	Effect	Effect	Order
			Being
			{ Identity Difference }
			Cosmos

consciousness ; and this always gives us either *pleasure* or *pain* when reduced to the basis of simple satisfaction. The same is true when the perception is purely mental or intellectual, if continued long enough to be estimated on the basis of satisfaction.

Next, also coming out of repeated experiences, and reaching forth in every possible direction, is Judgment, which always apprehends its mental object as either *true* or *false* when referred back to the elements of Reality. This is a fact, whether Judgment is corrected or not, although we may have some difficulty in seeing it in the latter case.

Then again, we have Choice as another factor in experience, which constantly makes for *good* or *evil*; so that self-regulation, which is fortunately possible to the soul, affords the first and most important exercise for the faculty of Will. This faculty also reacts upon the body to move it in response to the impressions received by sensation from the environment and interpreted by the totality of our mental powers. Since Will includes the ability both to do and also to refrain from doing anything in obedience to a given impulse, we see that choice covers practically the same ground.

All of these concepts are *subjective* with reference to the Ego; since they arise from experiences in and of the Ego, and have nothing to do directly with what is external.

In the second place, we have another class of

concepts, beginning with Substance, which continually eludes us under the phases of *accident* or phenomena, but is preserved to our apprehension under the notion of *essence* with its constant characteristics; and so we predicate these as its categories.

Another such concept is Energy, which is manifested in all the phenomena of *change*, whether physical or mental, and is also discovered as either latent or active in every successive *state*, maintaining the same in equilibrium and position.

The last of this class is Law, which as the regulating element of all Being is known under the principles of *cause* and *effect*, and is extremely varied in its manifestations. These two categories have already been discussed under Reality, and we need not repeat them here.

Although each of this second set of concepts is *objective* with reference to the Ego, yet the latter is capable of transferring them to itself as a secondary objective, else the science of Psychology would be impossible.

In the third place, we have still another set of concepts standing in a *reciprocatative* relation between the Ego and the non-Ego; although the latter may refer either to the external world, or to the Ego itself in whole or in part, taken objectively.

Here belongs Consciousness, as the whole active state of the Mind, with its power to appreciate self, the external world, and the mutual relations exist-

ing between the two entities in correlation with each other. The existence or non-existence of this correlation makes the distinction between the *real* and the *ideal*, when affirmed of the contents of our consciousness. Under Real we place all concepts having a corresponding objective reality. Under Ideal we include all concepts that begin and end in pure mentality, as representation, memory, desire, etc. Both principles are mingled in thought.

The Concept of Being has been implied above. It calls for purely mental action or ideation with respect to the principles of *identity* and *difference*, which arise in the distinction of the Ego and the non-Ego, and which are further elaborated with every new notion that arises in the mind. Under Identity may be arranged all purely assertive propositions, and under Difference all propositions of discrimination.⁶

Finally, we have the concept of Thought as an act of self-consciousness, taking up the concepts of Being and Consciousness, and yet dependent upon both of them for its own existence. This concept enfolds in itself the *absolute* and the *relative* as the logical elements of conceptuality. The principles of the Absolute and the Relative are not contradictions. As we understand them here, each is true in a cer-

⁶We concede no great importance to a principle of Negation which might be introduced here. It is like Kant's principle of Causation which Schopenhauer called a "logical false window."

tain sense of the same thing, event, law, or concept, and each of them is inseparable from the other as a complementary view of the same concept. Thus the *absolute* refers to the simple *fact* of being, regardless of *what* is, or in what relation it is. But the *relative* view takes in more or less of the space, time, cause, quality, or quantity involved. There is no *pure* absolute. All that exists is both absolute and relative.

Some may object that our “categories” do not clearly express the concept in every case; but we think that they will be found to cover the concepts when rightly viewed. A part of them will appear quite natural, while others are more difficult to determine. The first three hardly admit of any question, and we will not elaborate them at all.

The categories of Substance are two, *essence* and *accident*. By the former we designate the invariable substratum of phenomena, the existence of which we have shown in the chapter on Reality, but which we are not compelled to define or explain. Logical explanation does not necessarily follow a proof of existence. Yet we are inclined to the view of three kinds of substance, each with its own peculiar laws and forms of energy, unless Ether is eventually found to be merely a bond or medium of connection between Mind and Matter. But the intermingling of these three spheres of being with each other may give rise to those features or super-

ficial manifestations that we call accidents, such as form, quantity, combination, and all the phenomena either of inorganic Nature or of Life itself.

We need not further discuss each of the categories now, as a careful survey of each case in comparison with the others will probably show the reasons for our classification. We would also call attention to the various correlates, and their relations to the primary concepts and to their categories. Each correlate is the *completed phase* of a concept as seen by its own categories,⁷ and is the point of connection with a more general concept. Thus all subjective concepts meet in Consciousness, all objective ones meet in Being. The correlates of these, Mind and Cosmos, meet again in Thought to form the basis of Reason, and this reaches back again to the living Ego in Space and Time, as essential conditions both of our self-conscious Being, and of the external world.

Of course, we use the term "categories" in a very different sense from that of Kant in his celebrated tables, but there is no conflict on that account. We prefer to retain the terms as used above to avoid falling into a purely idealistic method which is unsupported by Nature, and therefore is liable to inconsistencies that are difficult to correct as mistakes are corrected in practical life. But, as others have

⁷The Subjective categories have double correlates. Their relations will be further discussed on page 000, et seq.

said before us, all of Kant's categories may be covered by the single term, *Relativity*; for both Quantity and Quality are relative terms in their last analysis, as surely as Space and Time. Thus the last term in our Genetic scheme covers the analytical and logical features of Thought which Kant elaborated successfully, and which are here reunited to our experience as forming the practical basis of conscious Intelligence.

THE RELATIONS OF MIND AND BEING.

However, our scheme still contains some possibilities of fresh genesis in various directions and combinations. This may be suggested by the last concept, Thought, which includes the Absolute and Relative. From these two principles, we may turn back to the previous concepts, and view them either in manifold relations, or in various phases of their existence, as portions of our possible experience.

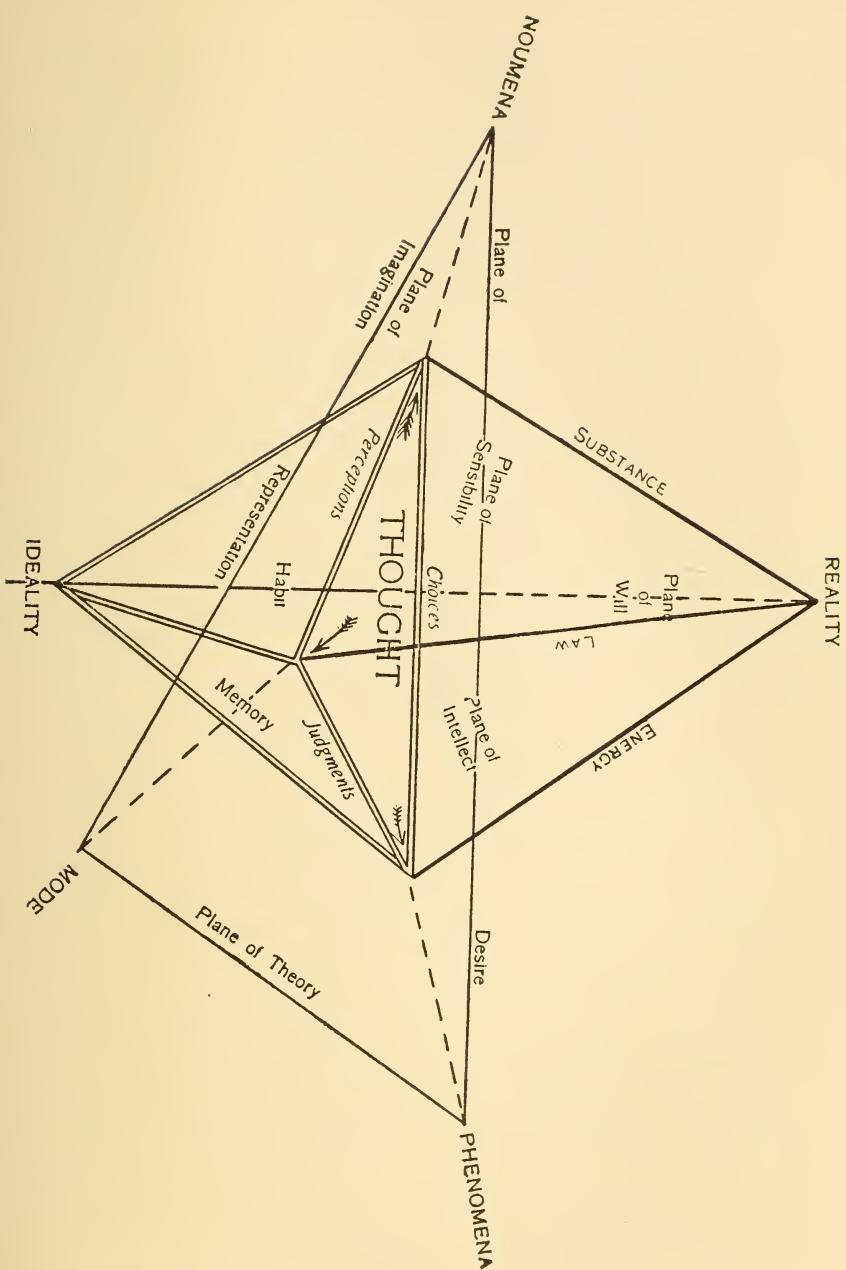
We may even construct a diagram that will represent the faculties of Mind, and their phases⁸ with special reference to each of the three Elements of Being. There is a real, an ideal, and an inceptive phase for each of the mental faculties, and each of these rests upon one of the first concepts in our genetic scheme. Thus from Perception, we have three phases, sensibility, representation, and imagi-

⁸A "phase" is a distinct state or condition of any reality, or even of a mental faculty as known to and by the mind.

nation ; from Judgment, we have intellect, memory, and theory ; from Choice, we have will or volition, habit or character, and desire or appetency. All of these may be represented in a geometrical figure, as shown in our Harmonic Diagram. We confess there is a certain stiffness about any diagram that renders it objectionable as an illustration of the very changeful and subtle phenomena of Mind and Being ; yet a diagram may afford us certain advantages of view that can be obtained in no other way.

Here, let us suppose that the three concepts, Being, Life, and Mind, are coincident in one central, vertical line, but not conterminous. This vertical line is intersected by a triangular plane which stands for Thought, and from each of its corners is extended a line reaching upward and downward to the one in the center, making a sort of complementary double pyramid. Now, the angles and faces respectively, of these two pyramids represent a separation and extension of the elements of Being and of the faculties of Mind, as before named. The upper part stands for the immediate relations of Mind to Being, or Reality ; while the lower part represents the mediate relations of Mind to Being, or Ideality. The three subjective concepts, Perception, Judgment, and Choice, are now seen along the edges of the plane of Thought, which is itself an expansion of the line of Life, and stands for the actual processes of mentality. If this plane be ex-

HARMONIC DIAGRAM.



tended indefinitely, like a table, the elements of Reality will appear to be reflected in the Mind as in a mirror by elements of Ideality; but the latter will be as unreal as the image in a mirror. It exists as a reflection or Ideal in the Mind, and thus has a certain relation to Reality; but that is all there is of its real existence.

The immediate relations of Mind and Being are shown in the circumstance that each of the mental faculties is in touch with two, and only two, of the elements of Being viewed as Reality. Thus, Sensibility is concerned with the successive states, positions, or conditions of Substance and Law; but it does not take any direct cognizance of Energy and Change, as may be proved by the kinetoscope, which exhibits no Action, but merely successive views; yet these appear blended as in real Action, and are not separately distinguishable.⁹ Some may take the view that we do perceive action or phenomena, as the light of a candle, the heat of a stove, the sound of a piano, the shock from an electrical machine; but all these are cases of illusion. What we perceive is twofold; first, the *sensation* of light, heat, sound, shock, in our nerves or sense-organs; second, the *mental image* or concept of a substantial entity in certain modes or states, as shining, hot, sounding, or electrical. And if we do not perceive the sub-

⁹For the relation of Action to Energy and Change, see page 00.

stantial body from which the action comes, we look about for it, or supply its place by our imagination. Yet, in each case the fact of real action is a mental inference, partly intuitive, and partly the effect of experience or education.¹⁰ For example, it is only within comparatively recent years that men have learned to know these phenomena as modes of action, vibration, undulation, oscillation, and the like forms of energy or molecular motion.

Again, for similar reasons, the plane of Intellect is interposed between the angles of Law and Energy because these embrace all that we *know* of Being; that is, mode and phenomena. Indeed, we have many philosophers who are so hard pressed for a suitable definition that they doubt the reality of Substance as such altogether, as we have already seen in this book.

So, finally, the plane of Will comes between the lines of Substance and Energy which are the necessary limits of its influence, whether exerted in the Ego as body or mind, or through the body upon the external world. Will has not in itself power to affect Law, unless it be in the case of human laws, or laws made by Will.

The relation of the reflected faces in the lower or inverted pyramid to those above is very interesting. Thus Sensibility reappears in the Mind as

¹⁰Hume's view.

Representation, Intellect as Memory,¹¹ and Will or Volition as Habit or Character. These secondary planes include far more of our mental resources than are at hand at any moment in the primary planes; for example, the most of our facts belong rather to memory than to immediate knowledge.

A third set of planes extends out into the surface dividing the Real from the Ideal, and represents the inceptive phases of Thought, resting upon the same Concepts as the first and second sets of faces, *i. e.*, phases of Thought. Thus we have Imagination, embracing Fancy and Fantasy as its opposite sides; also Theory, with its two sides of Doubt and Belief; and finally, we have Desire or Appetency, with its opposed sides of Hesitancy and Decision. That these spring from Perception, Judgment, and Choice is very clear.¹²

We may also remark that certain supposed simple activities of the Mind are really complex activities of two or more simple faculties. Thus Attention is Perception acted upon by Will, Recollection is Memory acted upon by Will, and Understanding is Perception acted upon by Judgment. The whole complex action of the Mind upon any given object is Thought or Reason.

¹¹Intellect is here used in the sense of Cognition, and Memory in the sense of Recognition. Comp. Ladd's "Descriptive Psychology," page 238.

¹²Some of these names are necessarily omitted from the Diagram. Appendix. Note 9.

We are not inclined, like Des Cartes¹³ and Spinoza,¹⁴ to make Geometry the basis of Philosophy; but we do regard the harmony of all the elements that are depicted in this diagram as a virtual demonstration of the relations that we have assumed with respect to Mind and Being.¹⁵ By this time, perhaps, we can see that no single concept or principle in psychology or metaphysics is fundamental to a system of philosophy, unless it be the principle of Life, which unites Mind and Being in our diagram. As we have said before, there is no philosophy without Life, that is, without a living Mind; and this is all the significance of Idealism as a theory of Being. Otherwise, it is a mere shadow, without even a Reality to cast the shadow.

THE ASPECTS OF BEING.

We have still to consider the real content of Mind or Thought in distinction from the process and relations of our last discussion. Here we come again to the celebrated "categories" of Kant; and if we venture to present a different form of statement from that which he has laid down, it is because his "categories" contain no active principle. They are crystallized and symmetrical, but they have nothing to help us toward "getting on." In other

¹³Kuno Fischer's "History of Philosophy," page 320.

¹⁴Martineau's "Spinoza."

¹⁵This harmony is pretty close to Schelling's principle of "Identity," for it practically covers the same ground.

words, they are purely formal or logical. Hegel saw this, and hence elaborated his great system on the principle of "becoming" or "endless transformations," with marvelous power and subtlety of thought; but neither did he inform the world as to how these "transformations" are effected.¹⁶ Our view is that they are all finally traceable to a fountain-head of Life, as will be argued in the next chapter; but for the present we must yet speak of the Aspects of Being.

By Aspects of Being we mean to indicate the various states and types of actuality in the progress of events, of life, of experience and thought, leading to the development of new forms, forces, conditions, relations, ideas, and systems, limited only by certain principles which will be considered in a subsequent chapter. These Aspects of Being may be fairly classified as follows:

OF MIND AND BEING.

1. Subjective, as in self-consciousness.
2. Objective, as in sense-perception.
3. Reciprocatative, as in the act of reasoning.

OF KNOWLEDGE AND BEING.

1. Nominal, represented by a mere symbol.
2. Conceptual, represented by a definition.
3. Real, represented by co-ordinations of experience.

¹⁶ Wallace's "Hegel's Logic," *passim*.

OF PRINCIPLES AND BEING.

1. Necessary, as independent being. GOD.
2. Relative, as dependent on co-ordinate or other being.
3. Contingent, as growing out of relations.

OF CHANGE AND BEING.

1. Motion, or change of the subject in itself.
2. Action, or change affecting its relations.
3. Purpose, or change in harmony with an end.

Some may object that the above plan is unsymmetrical; but we must remember that all progress depends upon an unequal distribution of elements.¹⁷ The forces and concepts must interlock instead of running parallel or standing still. As a matter of fact, there is no standing still, and this is implied in the relations shown in our diagrams. Change and Knowledge are the invariable condition, the "becoming" of Being and Mind. Perhaps we might add to the above triads several others, such as Reason and Being, with Analysis, Synthesis, and Genesis as aspects; or Character and Being, in Aspects of the True, the Beautiful, and the Good; but once launched in this direction, it is hard to draw the limit.

The notion of each aspect under the first head does not call for elaboration in this place.

We may remark that under the second head

¹⁷Appendix. Note 10.

given above, the “Nominal” being is the proper form of “universals,” or generalized conceptions in logic and metaphysics. The “Conceptual” being is practically the foregoing conception applied to an individual or concrete object. But the “Real” being *is* the individual or concrete object, including whatever is concrete in the same, whether known or unknown, along with its general characteristics.

Purely “Necessary” being, named under the third head, is one of the most difficult conceptions to be reached by the mind, and we shall not attempt to define it here. But “Relative” and “Contingent” being therefore include nearly everything that the human mind can know. “Relative” covers whatever is inherent only, as principles, properties, parts, organs, life, reason; while “Contingent” refers to that which exists by virtue of construction, organization, theory, or operation. Such are a house, a boat, a man, a state, a statute, a book, a picture, a business, a song, a sentiment. The two principles are united under the familiar notion of a “state” of being, as when H_2O is empirically known as ice, water, or steam, according to its temperature; or as a man is known as a bachelor, a husband, or a widower, according to his social condition; or as events are considered to be certain, possible, or unlikely, according to circumstances, as the weather, the efforts of men, or the operations of law may determine.

Under the last head in the foregoing plan, we note three kinds of "Motion" in the physical sense, vibration, transference, and circulation, though all may be united in one.¹⁸ These have their psychical analogues in perception and emotion, will and execution, intellect and reason. It is evident there can be no life, development, or progress without all these kinds of "Motion." But this is followed, or rather accompanied, by "Action," which implies the transference, not of the subject itself, but of its motion or influence to something else as an object. There are many formal ways or directions in which this may take place: mechanical, chemical, vital, social, mental, moral, with countless variations. Of course, "Purpose" signifies "Action" that is controlled and directed by a thinking Mind; hence it is as varied as are the capacities of the Mind to originate new forms and processes of existence.¹⁹

To conclude, in this chapter we have presented in a concise form the genetic concepts, relations, phases, and aspects of Mind and Being that underlie the intellectual and material progress of our race. What we have learned is that the problem of knowing and the problem of being are deeply and closely interlocked with each other by connecting principles and relations. Therefore, the common notion is a

¹⁸First conceived by Aristotle.

¹⁹"The theory of the 'unconscious' is satisfactory, and does not meet the requirements of Science."—Kuelpe's "Introduction to Philosophy," page 62.

sound one that knowing is equally as certain as being, and that both experience and reason are far more than dreams. To be firmly assured of this single truth is to have a basis for limitless ideas and principles bearing upon real life, including the development of Science, History, Art, and Religion, with their many branches and details.²⁰ To discuss these fully would fill many volumes; but they meet together on the plane of Life, the paradox and yet the resolving principle of Philosophy. It now remains for us to inquire for the actuating principle and ultimate ground of Reality.

²⁰Appendix. Note 11.

V

TRANSCENDENCY

HAVING now a fairly clear general view of Reality and its relations to the human mind, we must ask what men have always asked, Is this Reality which we know, including ourselves, the world of Nature, and the heavens about us, all that exists? Or is there something still deeper, on which this visible, sensible order, including ourselves, is dependent? If so, can anything be known in regard to this deeper Existence?

The students of physical Science usually take for granted the ordinary Logic founded upon Intuition, and also the Realities of properly accredited experience. But having investigated these for a considerable time, with the result of securing immense additions to the sum of human knowledge, they come at last to bounds that many declare to be impassable, at least by their instruments and processes of investigation. This conclusion, we have reason to believe, is measurably correct.

But fifty years ago, there seemed to be some prospect that "the world and all that is therein" might be accounted for by scientific processes. We

do not now refer merely to logical methods, but to the results of these in connection with scientific data. These processes were reducible perhaps to three, viz.: Analysis, Classification, and Derivation.¹

The first process was especially powerful. It was based on discoveries of facts that were partly accidental, partly the result of search by thoughtful men. Travel, experiments, the development of mathematics, and certain important inventions contributed to widen greatly the range of mental vision. The compass, quadrant, pendulum, lens, retort, and Leyden jar were the beginnings of vast achievements in investigation. The earth was found to be a ball revolving in an orbit about the sun in a system with other balls called planets. The distances of the solar system and even of some of the fixed stars were measured. The laws of optics and mechanics were mathematically demonstrated; also those of calorics. The earth, the minerals, the air, and water were decomposed into their elements, and the properties of these elements were ascertained, such as their specific gravities, atomic weights, affinities, and compounds, including the field of organic chemistry, until vast reaches of new and wonderful knowledge stretched away before the mind of the eager and astonished student. But still greater discoveries were made in the world of Life; the circulation of the blood; the functions of the brain and of many

¹Helmholtz's "Popular Lectures," page 393.

other organs; the processes of digestion, assimilation, and reproduction; the existence of blood corpuscles and other microscopic wonders; and all these gave a new and far deeper insight into Nature. By degrees, great improvements and refinements were made upon these crude beginnings, especially in the analysis of natural Forces; and as these were mastered, space and substance alike seemed to be almost annihilated.

Meanwhile the process of Classification went forward in connection with that of Analysis. The chemical elements and their compounds, the forces in their manifold phenomena and applications, the world of organic life past and present, all were sorted and arranged in encyclopædic order in manuals, in museums, and in men's minds. Thus plants were classified according to their flowers, animals by the number and arrangement of their teeth and the shape of their limbs. Man also was included in this system of classification, being at first distinguished from the apes by the simple circumstance that he has only two hands, while the apes have four. Then, too, many cross-references were found, until, not only in the structure of plants and animals, but even in Chemistry, a certain tendency to unity became apparent; while in Physics, the undulations of light, the quantivalence of heat, and the universality of electrical energy, all seemed to point to a kind of perpetual motion in the Universe.

Having found a place for everything, it was easy to fancy that we lacked but little of knowing all about everything. And this lack seemed to be supplied in the third and latest found process of scientific investigation; that of tracing out relations along the lines of derivation, or Natural Evolution.² Geology seems to have suggested the hypothesis, on account of the order of organic life as found in the rocks. Then Astronomy, with her nebulæ and formless worlds, gave support to the same view; and finally, many things in Biology favored it very strongly. Man has four limbs; so has a bird or a lizard. Cows give milk, and so do the mother whales. The horse has an appendix, so have human beings; and all animated creatures can be reduced to a few great types. Then also, every living thing comes from the seed or the egg, and a marked similarity is seen in their order of development. The mutation of species, the forms of embryos, the geographical distribution of plants and animals, are adduced as evidence that the world was not made, but developed by the mere operation of natural causes. The rational inference seemed to be, with some, that the Universe is self-originated, self-impelling, self-regulated, and will be so to eternity.

However, the last word has not been said. The Universe still contains some facts that can hardly be

²Lamarck's "Philosophie Zoologique," Darwin's "Origin of Species," and Wallace's "Natural Selection."

solved by the scalpel, the lens, the laboratory, or by mathematics. These facts we shall call the *Transcendencies of Nature*, because they transcend the ordinary means of scientific investigation.³ Yet they may be investigated by logical inference as readily as the data for many things that are universally accepted to-day in science.⁴ We may reduce the issues of Transcendency to three points, each of which is expressed by a single word, viz.: Definition, Operation, and Adjustment; still leaving room for some further considerations under this head.

DEFINITION.

Suppose we inquire, What is consciousness? Or to be less inclusive in our question, What is sensation? Or to limit the inquiry to yet more primary grounds, What is Life? To none of these questions does Science return a satisfactory reply. Yet they are not mere conundrums. They indicate chasms in the processes of scientific investigation.⁵ We have a definition of Life from Spencer that has become classical as an illustration of how to "darken counsel by words without knowledge."⁶

Huxley defines Life as a certain state of matter, like a vortex, an eddy, or whirlpool among the atoms,

³Morris's Kant's "Critique of Pure Reason," page 218.

⁴Cook's "Credentials of Science," *passim*.

⁵See Kant's "Teleology" in Windelband's "History of Philosophy," page 565.

⁶Spencer's "Principles of Biology," Volume I, page 74.

by which new atoms are continually drawn in and other atoms are disengaged, while the general form of combined action and matter is carried along continually.⁷ But he admits that this brief account of Life does not come within "miles" of a definition. Perhaps one might define Life as "a certain influence operating upon matter, interacting among the physical forces without being correlated strictly with them, and having a power to build and sustain⁸ cell-organisms of many distinct types, all of which are characterized by Heredity, Sympathy, and Periodicity."⁹ And under each of these characteristics might be given a vast fund of data from observation; yet the mystery of Life would remain unsolved, and much more the mystery of Mind. Again, we might ask, What is Law? Or Ether? Or Electricity? Or Gravitation? Some would turn the issue upon us by asking a counter-question, What is the significance of the Unknown and Unknowable?¹⁰ Our reply must be that Philosophy is larger than mere physical Science, and, therefore, is better able to define the limits of knowledge. These chasms that are mere blanks on the wall of the house of Science may prove to be open windows in Philosophy by which we can "Look through Nature up to Nature's God."

Let us ask again, What is Gravitation? This is

⁷Huxley's "The Crayfish," pages 84, 85.

⁸This includes the principle of self-preservation.

⁹Appendix. Note 12.

¹⁰Spencer and Huxley.

a fair question, but Science can give us no satisfactory account of Gravitation.¹¹ One may say, "Gravitation is that force by virtue of which two bodies of matter free in space tend to approach one another according to a definite law." The answer is clear, but not complete, since it brings up no less than three new questions: What is matter? What constitutes force? and, What gives efficiency to law? To these questions, Science is unable to give an answer, because they are strictly beyond her domain. Yet they are questions that may be asked by almost any sincere and intelligent person; since intuition, experience, and the doctrine of reality all constrain us to believe that somewhat exists which we call matter or substance; that somewhat is manifest in phenomena which we call energy or action; also that somewhat gives absolute efficiency to law, and makes it binding everywhere. And these three somewhats are apparently one, for they are found in closest harmony to the farthest limits of human observation. Are they self-existent and self-sufficient? Science may answer, "We can not tell." But of this much we are assured; that something, either what we have been discussing, or something deeper, lies at the foundations of Reality, and that this Something is wonderful in extent and power. It undergirds the mountains. It sits upon the seas. It reaches to the

¹¹Wright's "Scientific Aspects of Christian Evidences," pages 28-38.

heavens. We can not leave it, nor pass by it, nor escape it; yet we can not reach it, nor analyze it, nor account for it.¹² We must look further, and see whether there be not some tokens of its character discoverable by careful reflection.

OPERATION.

The first point to which we call attention here is the practical *illimitability* of Nature. We see this in both the littleness and the vastness of Nature's scale of works. These we may follow down to the last tiny bacillus or fiber or cell that is visible in the microscope; or out to the dim nebulæ in the farthest sweep of the greatest telescope; but we reach no top nor bottom in either direction. The same is true of the swiftness or slowness of these operations. A crystal of feldspar may have been æons in formation, and a sun æons of æons. Yet the lightning flashes for a moment across the sky and is gone; and a molecule of hydrogen is calculated to perform seventeen millions of vibrations in a second of time! We scarcely need add that the sum of these operations, physical, chemical, and vital, which are going on in the Universe at any moment is a measureless ocean of activities. Yet none can show how they are produced or sustained.

Next, we notice the *perfection* that belongs to these operations. Something is being made or done

¹²Psalm cxxxix.

at every instant, and it is well done. Compare a bee's sting with the needle of a hypodermic syringe, no matter how fine, and see the infinite smoothness of the one by the relative coarseness of the other. Compare a fly's wing or foot with any artificial mechanism, and see the amazing contrast in delicacy of construction. Compare a spider's web and spinneret with the product of our best spindles and looms, and see whether we have reached perfection in the textile art. What excellence we have attained is largely due to the fineness of materials already furnished by Nature. But the same perfection is found in larger and wider senses; in the flight of a sunbeam; in the clouds bringing rain upon the earth; in the opening and fructifying of blossoms; in the recurrence of sleep to the eyelids, by which we receive the balm of "tired Nature's great restorer." Nowhere is this perfection more clearly manifest than in our own bodies, where at every moment some millions of operations are going on unseen, unheard, unfelt by us, unless perchance we are not well.

Again, we come to the *absoluteness* of many operations in Nature. Such is the tendency of particles in a chemical change, under the influence of heat, moisture, or simple contact, instantly to separate or to fly to their respective places in the union of elements. Every explosion is an illustration. One would think the molecules would be in one another's way in such quick work. Even in a crystallizing

process, every particle behaves like a trained soldier that knows his place among the divisions and in the ranks of his army when going into camp. Still more absolute, or apparently unaccountable are such processes as germination, nutrition, and tissue-weaving in any living body of plant or animal; the selection of the proper materials from the lymph, or sap, or blood which is common to every part, so as to constitute the peculiar tissues of each particular part; as root, bark, leaf, wood, flower, fruit; or flesh, bone, skin, hair, teeth, vessels, nerves, and all the special organs of the most highly organized structure. These are a few of the considerations and examples that aid us to a conception of the measureless, complex, and wonderful operations of the Universe of Reality.

If we ask now, Why and how are these things so? one may say, "It is the nature of Nature to do such things,"¹³ but that is no explanation. We must have a deep source out of which to draw such an amazing fullness. The existence that underlies all Nature must be illimitable in the range and variety of its energies. It must be competent for marvelous perfection in its work. It must have a power of absolute self-activity, and be able to account for Life and Mind in its resources.

Is this Existence less than a Personal Being?¹⁴

¹³Hegel and Schopenhauer. Bowen's "Modern Philosophy," page 295. This is also Hartmann's "The Unconscious" again.

¹⁴Janet's "Final Causes."

We think not, and will give some reasons for this belief.

ADJUSTMENT.

We now desire to call attention to an old subject, but one which will not lose its significance to unbiased minds until logic is banished from the schools.¹⁵ This is a study of the indications of *design* in Nature, including the general proportions and adjustment of the forces and elements with a view to make provision for living creatures; especially with a view to human life, which appears to be the crown and flower of it all, so far as seen in this visible world. Many unsophisticated persons have believed that the manifold forms of living things, with so many striking adaptations of structure to meet the demands of their environment, were evidences of a special purpose in their organization, although this is denied by most adherents of natural Evolution. We take it that the fundamental causes, precise nature, and limits of the application of this evolutionary theory have not been fully set forth, as yet, by its accomplished promoters.¹⁶

One may *assume* that any living thing owes its characteristics wholly to the long influence of natural causes; that the ox defends himself with his horns solely because he happens to have them; and

¹⁵LeConte's "Evolution and Religious Thought."

¹⁶Bascom's "Historical Interpretation of Philosophy," page 209, etc.

that he has them because he wanted them; or because he is the descendant of some ancestor who was blessed with horns by a happy accident or freak of nature; that a bird flies because it has wings, and not because they were made for flying; although this involves one of the most difficult problems in mechanics that man has attempted—and thus far unsuccessfully—to solve. So one may say that the fish breathes by gills because it has them; and that Man thinks because he has a brain; and that the eye,—although it is found highly developed in many of the lower orders, and in our own case shows an adaptation to fifteen distinct principles in the laws of optics,—is yet a mere instance of what Evolution can do at its best. The circumstance that an Idea is revealed in every one of these forms of structure is not permitted to count for anything with such people;¹⁷ nor yet the additional fact that the general history of typical forms in Nature exhibits a remarkable parallel to the mental and industrial development among men of such structures as houses, boats, wagons, steam-engines, and the like, all of which present gradual but great improvements upon the original type or form.¹⁸

¹⁷Degeneration from malnutrition and non-use of organs can be explained, but the specific cause of these variations leading up to higher types of life has never been shown by physical Science, as Darwin admits. Changes of climate, etc., are only contingent causes of variation.

¹⁸Brooks's "Foundations of Zoology," preface.

But even if natural evolution is conceivable and probably true of some or many plant and animal structures,—no matter by what means it has been accomplished,—still we have cases of adaptation on a wider scale in which evolution is not conceivable. Thus, if it be contended that man is descended from some lower order of animal, yet it will not be held that he is in the natural line of descent from the cow, the horse, the dog, the sheep, the swine. Still less can any one conceive that he is closely related to plants, such as the cereals, or the fruit and nut-bearing trees, or the fiber-producing plants, or certain vegetables; yet Geology teaches us as plainly as it teaches anything that the domestic animals and the more useful trees and plants and grains all appeared on this planet about the same time that our race came into existence. Without these resources, perhaps the human species could exist upon the earth, but human civilization would be practically impossible. Then, what a series of fortunate and stupendous accidents are all these great gifts to the human race, if indeed they are accidents?

But we can go further and deeper yet, to the very foundations of the world, far below the starting-point of evolution as elaborated by Darwin or Lamarck, even before the dawn of life upon this earth, and still we find abundant marks of adaptation to the needs of man. Not only coal, petroleum, limestone, gypsum, and other substances of organic

origin,¹⁹ but the variety and abundance of useful metals, the minerals, the streams, the sea, the very air we breathe, all show a singular suitableness and adaptation both to man's physical welfare and to his moral necessities. See the mother as she packs a satchel or a trunk for her boy who is leaving home! Even though in affluent circumstances, she can not possibly provide for him in all things, nor against all sorts of contingencies,—not even with a case of well-assorted medicines thrown in,—as adequately as our whole race is provided for in the furnishings of this world, so admirably suited to become the abode of man!²⁰

We have just remarked that the evidences of design strike down into the *inorganic world*. This suggests the question whether all that we now see was merely *formed* by some intelligent Power, or whether it was *created* out and out. When we reflect that such substances as salt, sulphur, phosphorus, and carbonic acid are not very plentiful in the fertile regions of the earth; that an excess of either is dangerous to all life, and that they are usually found in just about sufficient quantity to meet the requirements of plants, animals, or men, it must strike us with a singular admiration and wonder. Salt springs are found somewhere in every fertile

¹⁹Here we may see the purposefulness of the lower forms of life on the earth.

²⁰Macmillan's "The Ministry of Nature."

land to refresh and sweeten the blood of the deer or antelope that seek them for many miles around. Every egg contains sulphur enough to blacken a silver spoon, though a chemist is required to tell where it comes from. No air on plain or hill-top is too pure from carbonic acid for the growth of trees, or grain, or red clover. No extensive place is found so devoid of phosphorus that man can not obtain enough to supply his nerve and brain machinery with it as fuel. The world is full of just such examples.

But we are not confined to material substances for argument. We may find other examples in the *physical forces* of Nature. We speak not now of the winds, and waves, and streams, and other general agencies, but of the various forms of Energy which are fundamental in the order of Nature, as gravitation, cohesion, electricity, heat, light, and chemical affinity. Take away any one of these, and what is left but chaos? Possibly, there might be a Universe upheld by gravitation alone, unless it also is dependent upon the other forces; but a sand-heap in a dark cellar could not be more dreary.

Some of these forces are more indispensable than at first thought they would appear to be. How could we get along without so simple and yet so unexplainable a force as cohesion? Relatively weak, it is still sufficient to give consistency to all things, some tough as steel or hard as granite, some soft as down

and tender as a blossom. We all admit the necessity of heat, though it is not the greatest of the forces, but why was not light omitted from the catalogue? It would seem that the world could do without it. Yet in general, light is indispensable to Life. Without it, the *chlorophyll* of the leaves and grass and the whole vegetable world would cease to be formed, so that the basis of food for the animal world would be absent, for this substance is one of the pillars of life. Then, too, the activities of all animated beings would be instantly limited by the lack of means or an element by which to discern direction and form, and to communicate with each other. If Life existed at all, it would be in a prison-house; while Intellectuality, under such conditions, is well-nigh inconceivable, and must be limited at best. Yet what a gentle force is light, touching the world with fairy wand, and bringing to our perceptions all imaginable forms and hues, from near at hand and from amazing distances! Not without reason did the writer of Genesis place light first in the order of world-creation, the first expression of the Almighty's power;²¹ nor was the Psalmist unscientific in praising Him "who maketh the outgoings of the morning and evening to rejoice."²²

A similar argument may be drawn from the *laws* of Nature. Take the law of capillary attraction.

²¹Genesis i, 3.

²²Psalms xv, 8; also "Paradise Lost," Book III, 1-55.

We could not do without it at all, and yet it does not seem to be a necessary law from the nature of things. Or take the law for the diffusion of gases. There is nothing to show it might not be otherwise; but without this Law we could have no atmosphere. Or take the law for the expansion of water when crystallizing into a solid, where it is an exception to the general rule of such changes; but, were it not that ice is lighter than water, the ocean would be full of ice, at least in northern latitudes. In fact, water is a wonderful example of special laws in many different ways,²³ as an absorbing repository for heat, as an almost universal solvent and purifier, as an innocent vehicle for the currents of life, as an instrument of power for man.²⁴

Finally, a combination of all these elements of design, as to substance, energy, and law, is seen in the mechanical conditions of our planet. Suppose it were as large as the planet Jupiter, then how would a man's legs be able to support him against the overpowering force of gravitation in so great a mass? Suppose its axis like that of Jupiter were inclined to the ecliptic at an angle of only 3 degrees, instead of $23\frac{1}{2}$ degrees, the variable winds would cease to blow, and the oceans would stagnate! Or, suppose that it turned on its axis but once a

²³The atmosphere is equally an illustration of providential foresight and adaptation.

²⁴Thales took water to be the first principle in Nature.

month, like the moon, what long cold nights, what long hot days, we should experience! It is evident that a very slight change in these familiar arrangements would be detrimental to human well-being and life, if not actually destructive to all living things.²⁵ Therefore, it is extremely doubtful whether other worlds have inhabitants like ourselves, or any life at all!²⁶ Surely, here is clear indication of a Designer, nay, of a Creator, who must have a very special interest in this world!

NECESSITY AND PERSONALITY.

But some one will say, "This idea of design is contrary to the doctrine of Necessity," as if there were some mysterious, impersonal power like Fate, which determines the course of all things, and leaves no room for a God who is anything more than an abstraction. But what does this Necessity amount to? So far as it exists at all, Necessity is the logical result of First Principles, the same that we have already discussed under Reality. But these Principles have no competency to originate anything. Mind or Personality has such a competency, since we know it as the source of Ideas and the repository

²⁵Such a change would be like the omission of a bolt or a wheel in some complicated machine, or like a change of sizes and proportions in the parts of a steam engine. It would spoil the machine.

²⁶See the remarkable article on "Man's Place in the Universe," by Alfred R. Wallace, in *The Independent*, February 26, 1903.

of Will. It is also able to apprehend these First Principles, and either to use them, or to meet them in its own practical work, working within their lines. We grant that Mind can not go contrary to these principles. It can not change $2 \times 5 = 10$; but it can form a concept, and realize that concept by an act or acts of Will, showing that it is of a higher order than mere Principle, and capable of adding to the power of principle. For, although there can be no actual principle apart from some Reality any more than there can be an Idea apart from a living Mind, yet in some sense principle becomes a cause or modifying element in that Reality as truly as an Idea becomes a rule of action in the Mind. Thus both principles and ideas become the source of laws, the former by necessity, and the latter by wisdom; but neither of these is contrary to the other. The notion that wisdom or originality is made powerless by eternal Necessity ignores the commonest lessons of experience. Although Life can not do away with principles, yet it exists and works within their lines with results that are wonderful to contemplate. Therefore, just as we recognize the signs of Life in organism, appropriation, reproduction, and type, so we recognize the tokens of Mind in the ideas, purposes, plans, and results that are visible everywhere in Nature,²⁷ and are familiar to every student of Sci-

²⁷Bowne's "Metaphysics," pages 158-161. Also the chapter on "The Cosmos as Mechanism."

ence. And the same evidence that leads us to see the personality of this Designer in the marvelous contrivances and perfect balance of all the elements, forces, laws, and conditions of this world, making it a suitable place for the development of Life, also suffices to reveal him to us in the aspects of Wisdom, Power, and Benevolence.

COMPLETENESS.

This striking characteristic of Nature is clearly manifested by the fact that the means, the intermediate steps, and all the intricate mechanism and contrivances of each organism are kept in the back-ground of observation, or concealed from view, making broad room for the finished product, whether plant, or animal, or man, or the earth itself. Not the viscera, nor the nerves, nor the special organs of sense-perception, however remarkable, can usurp the place of the outline, the figure, the countenance, that which Art represents anew in statues and pictures, which is evidently *the finished fullness of being*.²⁸ This is, no doubt, because these outer aspects stand for life, for feeling, and for intelligence, as against the inner plan by which life is sustained. Where such concealment is not practicable, as in the case of many plants and trees, the structure itself is

²⁸This is especially to be observed in the contrast between the outward symmetry of the bodies of mammals and the unsymmetrical positions of their internal organs, as the stomach, liver, heart, lungs, etc.

turned into a thing of beauty with spreading branches and tender leaves, that are embellished with flowers and fruit as the constant sign and token of life. And even the bulky Earth, as a product of the same Master hand, has its inner treasures and secret channels of activity that are hidden away under the splendid drapery of soil and verdure and forest, of clouds and snow and sea. The like feature is usually noticeable in all the various stages of the growth of an organism. "First the blade, then the ear, and after that the full corn in the ear."²⁹ Yet the fact of uncompleted development is no bar to relative completeness; the child is as perfect in itself as the man, each offspring has a charm and a delight of its own, and vital existence is Life all along the way of individual being.

We must not overlook the remarkable *Variety in Unity* that is presented to us in the order of Nature. While the number of distinct forces and even of the chemical elements is not large, yet the variety of compound substances³⁰ and their phenomena, and the number of species of all living things, with their different modes of existence, their diversities of form, size, habit, and characteristics, and their manifold adaptations to environment, are simply amaz-

²⁹Mark iv, 28.

³⁰There are nearly 70,000 organic compounds known. See Popular Science Monthly, April, 1900, page 677. There are also said to be 150,000 forms of plant life and 400,000 forms of animal life, including 250,000 insects, known to science.

ing. It seems the product of infinite ingenuity, and as though nothing new or different could be imagined, unless, indeed, it had already existed in the past, and is found in the geological records of the rocks. To heighten this idea we have the wonderful balance of the manifold parts of Nature relatively to each other, elements, minerals, climate, plants, and animals of every sort, often keeping each other within due bounds, and thus sustaining the harmony of all. This harmonious variety is still more striking when we observe that no two plants or individuals of the same species are ever exactly alike, no two bits of scenery are ever repeated, no two waves of the sea or leaves of the forest but are distinguishable.

To this we may add another notion, that of *Decoration*, which manifestly abounds in all Nature, both animate and inanimate. Beauty, harmony, and picturesqueness are to be seen on every hand, even by the dullest observer. The painting of a moth or butterfly, the exquisite markings of fishes and serpents, and wild beasts; the splendid hues of humming-birds and of many other feathered *genera*; the glorious tints of autumn woods, the majesty of a coming storm, the sublimity of the mountains; the tenderness of spring, the morning dew, the warble, the fragrance, the hum of life, the solemn grandeur of the midnight stars—all of these speak to the soul of man as the works of One delighting in such

things. They are not to be accounted for without the ideas and power of a great Personality, who hath laid the foundations of the earth from the beginning, and who "hath made everything beautiful in his time."³¹

It may be urged that Nature also gives us many examples of imperfection and decay; but upon further consideration it is found that even these contribute yet another great idea to the plan of Nature, that of *Elimination*, in connection with a world-wide *Economy*, so that even Death itself may often be turned into a blessing. This principle is deeply wrought into every living organism, by which not only the waste and deleterious products of nutrition are carried off continually, but the withering of grass, the falling of leaves, the bodies and excreta of animals, the accumulation of corals, of sea-shells, and also of peat-bogs—all contribute to the fertility of the soil, to the growth of islands and continents, to the production of coal, and petroleum, and building materials; thus constantly testifying to an admirable and all-embracing wisdom in the universal plan and order of the world, in which the balance of conflicting interests is somehow preserved intact from age to age.

So much, then, for the Transcendency of Nature in its three degrees of Definition, Operation, and

³¹Ecclesiastes iii, 2.

Adjustment or Adaptation. These are not merely the fanciful distinctions of a controversialist, but great and palpable elements of Truth, going beyond the immediate sphere of physical Science, and yet in a proper sense confirmed by the discoveries of Science itself.

What is the significance of these things? They remind us of the conception of God as set forth in the Hebrew Scriptures, and in the New Testament. They impress us with the "Intelligibility" of the Universe.³² They show us that the development of life, and especially of human life, has been the purpose of the ages past, in preparing and unfolding this Earth. We might go further, and maintain that the general course of human history upon the Earth is a confirmation of this view, as a mere carrying forward of the original purpose to loftier heights of physical and moral existence. In view of these things, who can deny a Supernatural Providence? Yet, Blessed are they who when they see can believe; for a foolish doubt is the very miasma of modern thought.³³

³²Argyle's "Philosophy of Belief."

³³Roger's "Modern Philosophy," pages 106, 107.

VI

ORIGIN AND DESTINY

THERE is yet another question in the problem of Nature which embraces all those elements of Transcendency that we have mentioned, and reaches still beyond them. It is the question of Origin and Destiny, and these involve Creation, Purpose, and Ultimate Good ; or, in a word, Finality.

Perhaps not everything has had an Origin, or will have a Destiny. For example, it can possibly be shown that fundamental principles are eternal. These principles differ from laws, in that the latter are either always constituted by a decree of Mind, or exist as the necessary result of principles ; but the principles themselves are unconstituted. For instance, the principle of cause and effect can not have a cause ; hence it is unconstituted. The same is true of the principles of identity and difference, of the relative and the absolute, or of time and space, or of mathematical concepts, or of the forms of the syllogism in logic. Yet none of these principles could have any actual existence unless they were inherent in some Reality, and that must be a Mind. If this

does not prove that Mind is eternal, at least it comes very near to making the opposite view inconceivable.

ORIGIN.

That our own minds have had a beginning, we all know by our experience of growth in body and mind; and also from observation of the fact that other individuals of the human race, besides animals and plants, are constantly coming into existence. That all Life upon this Earth had some beginning is certain from the study of Geology, where we find in the fossil-bearing rocks a gradual progress from the lowest to the highest classes of organisms. That the Earth itself, and other similar bodies in space, have had a beginning seems proved both by Geology and by Astronomy, but more especially from the laws of heat and motion, and from our observation of the sun, moon, and stars as they appear in various stages of existence at the present time. Thus we feel it safe to say, "All Nature had a beginning."

The inquiry now is, How and from what Source did each of these kinds of existence arise? If we consider the human mind, the weight of scientific evidence goes to show that it originates from Life within the human body. Now it is a law of Nature, long received, and not refuted by scientific observation, that all Life comes from Life;¹ and there is no

¹The *Independent* for October 24, 1901. Dr. Walsh's article on "Virchow," page 2519.

such thing ever known as spontaneous generation. It follows that we know the immediate ancestry of each individual or species that are now upon the Earth, of course including Man. The only question that arises must be upon the remoter origin of each species; but even this is only a relative inquiry, not reaching to the ultimate origin of all physical life upon the Earth.

For, in any case, there must have been some primitive germ, or germs, or forms of organism.² Because of the radically different types of plant and animal structure, some insist that there must have been a number of primal origins of life upon the Earth.³ The star-fish, the oyster, the lobster, the earth-worm, the insect, the reptile, the bird, the mammal, all present radical differences of structure. So do the mushrooms, the mosses, the ferns, the grasses, the herbs, the vine, the cactus, the oak, the palm, the pine, and yet other varieties of the vegetable world.

The time required for the development of all these types of life by mere natural variation seems utterly too great for the earth's possible age according to our best physicists.⁴ But whether there were few or many real origins,—and why not several, if there was one?—the first is still unaccounted for by

²Darwin's "Origin of Species," in last chapter.

³Agassiz; Dana; Gray; Mivart.

⁴Lord Kelvin and Clerk-Maxwell.

anything in Biology or Geology. So are also the causes of most of the variations that are supposedly leading up to higher forms of organism by principles of selection and survival.⁵ In this connection, we observe again that the inherent forces of life which develop and build each unit of a species are also undiscovered, except in so far as we see their results; yet these forces must be of prime importance.⁶

What is our necessary inference from these facts? If the issue is raised as to whether mind or organism first existed in the Universe, there can be little question to any clear and reflective mind. We have already seen that the marks of Intelligence and Purpose abound everywhere in Nature, from the highest forms of organism to the very foundation stones of her existence; to the laws, the forces, the very elements of the "world-stuff." We have no other possible resource than to attribute the first Life upon this Earth to some agency that is higher than the mere Earth, that has in itself the potency of Life, that has also an intelligent foresight.⁷ We must think of this agency, if we *think* of it at all, as involving a Mind which is far greater than our own,⁸ possessing incomprehensible Power, imbued with the authority essential to Law, in which the principle or

⁵This was fully admitted by Darwin.

⁶Orr's "Christian View of God and the World," pages 98-101.

⁷Appendix. Note 13.

⁸Roger's "Modern Philosophy," page 70, lines 17-22.

element of Life dwells and has dwelt from Eternity.⁹ This Author of Being, Life, and Mind we designate by the word God, our best and most adequate term for the expression of his attributes.

“But,” some one will say, “You have not yet accounted for the existence of God.” True. But we have accounted for Nature, for this world and all that it contains, including Man. This we have done from the evidences written clear and broad upon the face of Nature, giving us to recognize therein a personal Creator, who is, whether we can account for him or not.¹⁰ The notion of an out-and-out Creation is one not easily conceived by a logical mind, even after the fact is fully demonstrated.¹¹ Yet this notion is no more difficult than other notions accepted by every one; such as the law of gravitation, the relation of the finite to the infinite, or the power of the mind to conceive of abstract truth. The faculty of creation is a mystery, but no more so than the ability of any person by an act of will to raise his arm or to utter a sentence. It is true that while we can do many things, to create out of nothing is beyond us. But that merely reveals one of our limitations. We can form a plan, a structure, a work of art, as a wholly new thing in the world. Why then may not a Personal God be well able to create

⁹Emerson on “The Method of Nature.”

¹⁰Job xi, 7.

¹¹Not necessarily to the exclusion of an evolutionary process, if this also is traced to a Creator.

the very elements out of which the earth is built? For who among us can tell the resources or guess the potencies of the Divine Being in himself?¹²

But again it may be asked, If God did call into being the world of matter, of forces, and of life and mind, how can finite creatures like ourselves know that we know him? We might answer by asking a similar question, How do we know that we know ourselves? It all comes back to the old questions of Consciousness, Intuition, Inference, and Reality. We must believe in God, or vote ourselves fools.¹³

Yet we may make use of an analogy to assist us in our mental orientation. An analogy may not be of much value as a direct argument; but it often aids us by throwing out objections of a negative sort, and by helping us to new conceptions of truth; for language, and hence thought also, are largely figurative, based upon analogies, so lifting the mind upward where it can not walk. We may, therefore, consider the partial similarity of our own minds to that of the Supreme Being, and show by a simple comparison some points of likeness and unlikeness between Him and ourselves. A dewdrop may reflect the sun's image, although one is wholly different in nature from the other, and billions of times larger. Yet both have something in common, a curved sur-

¹²Appendix, Note 14. Job xi, 7. Bowne's "Herbert Spencer," page 71.

¹³Psalm xiv, 1.

face, and a property of sending forth light. So we, although possessing no independent life, may yet live and think, by the grace of God, because we are formed in his spiritual image. We call him "the living God" because he possesses those attributes of personality and power that we find in ourselves as living. Yet our living, like the dewdrop's shining, is doubtless but a borrowed or reflected attribute, from which we may think how far God must exceed us in fullness and independence of life. Every exposed object on the earth is lighted by the sun, yet only a few things, as dewdrops, are capable of reproducing that light, and reflecting an image of the sun. In like manner, the earth is well-nigh covered by living things, yet only man reflects the divine Mind in self-conscious thought.¹⁴

Although our inquiry involves the scheme of Nature as a whole, yet it chiefly concerns the human race; because with all his animal nature, his limitations, his weaknesses and his meannesses, the fact still stands that Man is "the one bright, consummate flower" of Creation,¹⁵ the being to whom all others here below are subservient, all else is contributory, and who, if he should perish from the earth, will leave no heir to his endowments and history.¹⁶

¹⁴Genesis 1, 26-28.

¹⁵Appendix. Note 15.

¹⁶Drummond's "Ascent of Man."

THE DIVINE BENEVOLENCE.

The question may be raised here, Is the creation of this world any proof of the benevolence of God? Granted this great power and wisdom in the performance of so vast a work, what does it all amount to? Life is so full of toil and pain and bitter disappointments, the world is so filled with conflict and suffering and death, that some have felt it was but a cruel mockery, and have more than questioned the goodness of God.

Our answer to this question must be twofold. First, there is the point of limitations. The world could not be built without principles, but principles are a necessary limitation to any possible world. These principles begin to be known to us in ourselves, subjectively, and they involve contrasts of state or condition as to pain and pleasure, truth and error, good and evil. We do not mean that each is as desirable as its opposite; but that wherever the one exists, the other is its possible negative, or opposed element.¹⁷

No one finite being can enjoy all possible good; yet negative evil may come from the mere privation of good that we really need. Not only is this true of barbarians, but civilized society is largely built upon the principles of privilege and superior might.

¹⁷Orr's "Christian View of God and the World," Lecture V.

Whether this be legitimate or not, the fact remains that even in the most highly favored lands the vast majority of men and women live in the midst of great privations. A fair amount of labor with just reward is wholesome for all; but many are only burden-bearers, mudsills for the social fabric, submerged in poverty, ignorance, disease, and squalor. The speedy relief of these conditions is one of the pressing duties of a sound philosophy and of a Christian civilization.¹⁸ Yet much of the so-called evil in this world is only negative evil. Even death, the privation of life, may be in various ways a partial blessing. On the other hand, there is positive evil which can not be ignored, great and terrible evil. Part of this may be only relative, the sacrifice of a lower or lesser interest for the sake of a higher one or for a completer and more enduring good. The world is full of just such sacrifices, in Nature, in History, and in our own experiences. But still there is the question of evil in character. This comes from a misuse of the very powers that God has intrusted to his children. The more we are like Him, in personality, in independent choice and self-sufficiency, the greater is our peril of being destructive to ourselves or to others in the world around us. We may freely say, however, in view of these things, that unless such evil were among the possibilities of ex-

¹⁸Henry George's "Progress and Poverty."

istence, no such world of good, of happiness, and of progress as we actually see would be possible. It is only a question at last whether it were best to create or not to create, under a prospect of such contingencies. Over against the hard and evil lot of so many classes of people as just mentioned may be set the interest, sentiment, and even poetry, which are so often felt as a distinct source of delight by those men who succeed in their occupations. The farmer likes the fresh air, the newly-plowed land, and to see things grow; the mechanic delights in the hum and roar of the shop where things are being made; the shepherd loves the wildness of the bleak desert or the rugged mountain; the soldier or sailor is charmed by the frequent changes of scene; and even the humble miner is hard to separate from the darksome mysteries of his underground abode. We should not, therefore, despise these simpler joys of existence to which many persons, overwrought in body or mind, look back with longing. The best moods and even conditions of life are not those most highly artificial in their surroundings; but rather those in which we are nearest to the normal state.¹⁹ Since every creature normally desires to live, we can not doubt but that Life is a boon, even for a brief day of happiness. How much more when at least some may attain to an eternal heritage!²⁰

¹⁹ "In medio tutissimus ibis." Horace.

²⁰ "I am come that they might have life and that they might have it more abundantly." (John x, 10.)

OUTCOME.

There is still one more consideration to be taken up in respect to the plan of Nature, namely, *the Outcome, the Product of the Process*, that which is evolved, elaborated, perfected, and shall stand as the ultimate End of the work. In any factory or industrial establishment, time is used, capital is invested, labor is expended, fuel is consumed, and material also, to what final purpose or good? Surely it is to *make* something valuable, something to sell, something to be used, something to aid us in our sustenance or enjoyment, something to be treasured up in our lives. What else can be the aim of Human Life?

And there is such an outcome. "A thing of beauty is a joy forever." So a kind word, an act of mercy, a spirit of sacrifice, a pure heart, a noble character, an heroic career, these have an intrinsic excellence that can never pass away. They are the gold dust of the workshop, the gems of the dark mine, the art and soul treasures of the Universe. Now the earnest question arises, Can these things be so, and yet the lives that made them real be doomed to utter extinction? Surely not, if the Author of the Universe is a Rational Being!²¹ And this last is precisely what we have been showing all along from the intelligibility of the world around us.²²

²¹ Appendix. Note 16.

²² Fiske's "Destiny of Man;" also his "Life Everlasting."

DESTINY.

The question of *Destiny* is hardly less pertinent to Philosophy than the one we have just been discussing, and it is certainly of far more practical interest. Around us everywhere are indications of a law of perpetual change. The alternations of light and darkness, of summer and winter, of growth and decay, of life and death, are world-wide phenomena. Some organisms run a briefer course than others. The May fly lives but a few hours. The cereus has one night of glory, and is gone. A single season marks the limit of being for the vast majority of living things. It is true that many last longer, a few for decades, and Man until threescore years and ten; but a century sees few survivors except some kinds of trees. Even the cities, the nations, and the civilizations of men arise and pass away in the ages as the geological monsters have done before us. There is a certain progress in the scale of Life, in the development of Mind, in the growth of History, Art, and Letters. Yet we have much reason to believe that the Earth itself will at last grow old, and be no longer fit for the abode of Life. Thus all things visible and sensible will pass away.²³

Yet the origin of things, the plan of Nature, and the endowments of Man, all go to demonstrate that we are distinctly and peculiarly related to the

²³Rubaiyat of Omar Khayyam.

Fountain Head of Life, and of Mind, and of Benevolence. The existence of these relations is recognized and expressed by the words Providence, Worship, and Immortality. But in consideration of our present moral condition, the limitations, conflicts, and excesses of mankind in this world, perhaps the whole sum of our relations to God may better be put into a single and more spiritual term, Redemption; a term that expresses the forces and processes which make for our uplifting.

Like other factors of life and experience, this Redemption is a process that depends in part upon time and personal environment. But again, the process depends not only upon external influences and special provisions that have been made for us; but also upon the soul itself in making wise decisions, and in acquiring the affections and character that constitute moral blessedness with God. In the rough and rapid whirl of this earthly life, not all souls appear to be attaining to this estate; but many undoubtedly do so, and this is certainly a part of the highest purpose in Nature.

This uplifting is based first of all upon a faith in Divine Providence. Some doubt this, affirming that it is inconsistent, if not impossible, for the Supreme Being to set aside the laws of Nature that He has established. Yet that there has been a Providence from the very beginning of this world or of Life, we have clearly shown from the manifold evi-

dences of Adaptation or Design in Nature, extending far below Life to the foundations of physical being. And if at the beginning, why should not the special work of Providence be continued later, and from time to time all along the course of History? We believe that such is the only rational interpretation of the manifold events, both great and small, which have wrought in times of crisis to the moral and general elevation of our race. The idea that God is unable to do anything now for his creatures is a weak presumption, contrary to the most common lessons of experience. For if, although Man can not do anything to change the laws of Nature, he can still work along those laws or within them and accomplish marvels, surely God can do as much and vastly more. He may even work in ways beyond our thought or deepest comprehension, moving upon the very foundations of Nature whensoever He will. "With God, nothing is impossible."²⁴

This leads us easily to the idea of Worship, which is founded upon our conscious relation of dependence, and also upon a sense of the Creator's regard and care for his creatures. If God has been spending ages past in preparing this world to be the abode of Life, and in bringing forth all living things, including ourselves, into being, it seems but reasonable that He should continue to extend his daily care and interest toward our lives and welfare.

²⁴Isaiah xliii, 11-13, and Luke i, 37.

As for us, there can be no doubt whatever that a sense of such regard tends to quicken in us a disposition of pure affection and lofty resolution, thus making us to be "the children of God" in a spiritual and supernatural sense. Far from degrading human nature by weakness and superstition, the intelligent worship of God elevates man into dignity and moral worth as nothing else in all the world can do. It may be true that many call that worship which comes far short of intelligent devotion, but this proves nothing against true worship. Rather it is a tribute which human nature in general is often constrained to render to "the unknown God," who was once worshiped at Athens.²⁵

The hope of Immortality is one of the most beautiful and touching instincts of the human soul. As one has said, "No dolphin funeral was ever held among the coral groves of the sea; no sad procession of fallow deer ever wound among the green glades of the forest to pay the last tribute of respect to a departed kinsman or comrade."²⁶ But the whole history of our race from the Cave Dwellers down to the present hour is replete with funeral rites, and with earnest anticipations of a Hereafter. Now, if Instinct counts for anything here, as it certainly does in the lower walks of Life, we have a most powerful argument for Immortality. And what is

²⁵Acts xvii, 23.

²⁶W. R. Alger's "History of the Doctrine of a Future Life."

more, there is abundant room for it in Science; for the unexplored reaches, the untrodden heights, the shadowy recesses of Being, Life, and Sympathy all about us are full of possibilities²⁷ and even of suggestions.²⁸ The record of Life, either individual or general, is incomplete in the realization of justice and of its own best and highest ideals unless there is a life beyond the dissolution of the body; and this is another of the deepest thoughts of Philosophy, as well as of Religion.

The principal objection to this doctrine is the lack of experience. But it took men over four thousand years from the dawn of Science to discover the existence of electricity as one of the greatest forces in Nature. What wonder then if the secret of ethereal and incorruptible Life eludes us still?²⁹ Many experiences and observations of various kinds are believed to look in this direction, as also does the doctrine of Religion. But a fuller discussion of this matter pertains to the Evidences of Religion rather than to Philosophy. For the present we may say only that the Christian Religion, which includes all the best elements of the ethnic faiths, which is in essential harmony with the highest truths of Science and Philosophy, and which alone gives a satisfying

²⁷Stewart & Tait's "Unseen Universe." "There are more things in heaven and earth, Horatio, than are dreamt of in your philosophy."—"Hamlet," Act I, Scene IV.

²⁸Appendix. Note 17.

²⁹Appendix. Note 18.

response to the most earnest questions of the human soul for time and eternity, is certainly entitled to our most serious and reverent regard. Amid the mists and shadows that encompass our path of life, the only clear light of moral truth, spiritual beauty, and Divine love is that which comes to us from the history and principles of the Gospel, beckoning us like stars of the morning, to faith and hope for the Hereafter.

VII

THE CONDUCT OF LIFE

AS LIFE is the beginning, so it is also the end of right Philosophy. Its results may be realized, especially by civilized man, in social progress, in intellectual culture, and in moral blessings for himself and others. The cynical question, "Is Life worth the living?"¹ may be answered succinctly, "It depends upon how one lives his Life."

THE SECRET OF SUCCESS.

We all have some opportunities and possibilities. But even if leisure, light, liberty, and luxury be ours, the secret of a successful life is not half so much in them as in ourselves. The mere endowments of life, of health, of manhood, should inspire each human being with that self-respect which is the first article in Virtue's creed, and which enables one to rise in thought and character above mere environment.² All men are liable to limitations, and even to disaster; yet it is glorious to live for one bright day

¹Mallock's "Is Life Worth Living?"

²"Meditations" of Marcus Aurelius.

in a good conscience. How much more to live for many years doing some good, making friends, learning new truth, aiding the progress of the world to better things, drawing nearer to God!³

Though checkered with many dark shadows, yet on the whole the history of this world is inspiring as a record of progress and achievement. The rise of Man from barbarism to humane culture, the establishment of order, the comforts of home, the amenities of good society, the development of Arts and Sciences and Literature, the marvels of modern discovery, invention, and industry,⁴ all conspire to make Life very interesting, even to one who can attain to only a moderate position in the world.⁵

But for individuals the value of Life must depend largely upon the individual power of self-determination to the best things in Life.⁶ This power may be variously attributed to enthusiasm, conscience, or moral courage; but its development as a dominant note in each Life is undoubtedly aided by intelligence, discipline, religious faith, and obedience toward God as a Heavenly Father.⁷

SOME CAUSES OF FAILURE.

It goes without saying that the majority of mankind in almost every age render themselves miser-

³Lubbock's "Pleasures of Life."

⁴Draper's "Intellectual Development of Europe."

⁵Hamerton's "Human Intercourse."

⁶Deuteronomy xxx, 19.

⁷Mabie's "The Life of the Spirit."

able rather than happy, and fail through sloth, evil indulgence, reckless passion, lack of principle, and other forms of depravity, to make their lives count for anything more than animal existence, with some traces of culture through environment.⁸ Even this last is often nullified by the influence of those pernicious courses into which Man is more prone to fall than any irrational creature, simply because his gift of reason is a source of peril unless it is rightly used.⁹

Since Law obtains as surely in the moral and spiritual realm of being as anywhere else, it follows that there is a way to do well in life, and a way to do ill; a way to rise in the scale of being, and a way to certain degradation; a way to moral blessedness and a way to ruin.¹⁰ The recognition of this plain truth is one of the very first conditions of finding real joy in Life.¹¹

One of the greatest dangers to successful Life is found in shallowness of motive, and a lack of moral tone because one has no serious convictions of moral truth, no high moral aims to accomplish, no worthy ideals of duty or privilege.¹² This kind of defect is nearly impossible to overcome, unless by

⁸Carlyle's "Sartor Resartus."

⁹Nordau's "Degeneracy."

¹⁰It is the perpetual labor and privilege of intelligent beings to search out the way to better things in life, and not to give over to base pessimism.

¹¹Ruskin's "Seven Lamps of Architecture."

¹²Appendix. Note 19. Also Lubbock's "The Use of Life."

some sharp experience or pungent influence that awakens the soul to a sense of its situation, and stirs it to new and higher purposes, enforced by a sense of dependence upon divine grace.¹³

Still another danger is one-sidedness, or an undue absorption in some lower aim, as the pursuit of pleasure, knowledge, wealth, or ambition, to the neglect of real character. Not even "Art for Art's sake" can save us from peril here. As the spiritual side of Life is the highest of all, it follows that neglect in this particular is the most dangerous folly,¹⁴ because it tends to vitiate the spring of all noble motives, and poisons Life, so to speak, at its very source. For, "where one's treasure is," where his interest lies, "there will his heart be also,"¹⁵ and that fixes his grade in Life.

PROVISIONS FOR MORAL WELFARE.

Since Life includes body, mind, and soul,¹⁶ whatever may be the relation between these vital spheres, they are certainly so blended in man that one law runs through them all; that is, a common law of well-being. Now, every one knows that the body requires care, nourishment, and exercise to preserve

¹³Phillips Brooks's "New Starts in Life."

¹⁴Ruskin's "Stones of Venice."

¹⁵Luke xxi, 34.

¹⁶"Heart" and "soul" are commonly used in this connection to signify the moral side of our nature as distinguished from the purely intellectual.

it in health and vigor. Most persons are aware of a similar need of provision for the mind.¹⁷ It is, therefore, but reasonable that the part of our nature which involves moral capacity should require provisions for its welfare in proportion to its higher place and influence among the other elements of our Life.¹⁸ Such provision for the well-being of the body exists both in itself and in the world about it. A similar state of things can be affirmed of the natural provision for our mental well-being. It will not appear strange, therefore, if provision is made in some way for our moral welfare; and, in fact, History shows that Religion in some form is practically inseparable from the progress of Civilization.¹⁹

This does not preclude defects in one sphere more than in another. Ignorance, disease, contingencies, and subversion may be found in each and every department of Life; but the force of analogy is all the stronger, and the demand for improved conditions all the more imperious because of these deficiencies. That humanity is slowly working toward an unseen but final goal is the lesson of History and the hope of the world.²⁰ This being so, the people of each succeeding generation have an outlook full of comfort and inspiration so far as they are disposed to make it good by hearty and

¹⁷Hamerton's "Intellectual Life."

¹⁸Martineau's "Seat of Authority in Religion," Book I.

¹⁹Appendix. Note 20.

²⁰Kidd's "Social Evolution."

consistent endeavor, by not shunning even "the strenuous Life."²¹

THE SPIRITUAL CONFLICT.

The necessity of Struggle and Sacrifice for the realization of Progress has been written deep in the warp of Nature from the beginning. "No excellence without great labor" is the daily experience of Man. Perhaps this is a necessary element of satisfaction for the soul. Or it may be in the Divine wisdom the only sure means of attaining to the highest spiritual refinement, of settling us in faith, charity, and patience. If there be any room for "an idyllic life" in this modern world, certainly it is limited to a very few people.

To seek thus to attain is not only desirable in the highest degree because of the intrinsic excellence of moral beauty, truth, and goodness;²² but it is also a moral obligation, arising out of the will of God as Author and Finisher of the problem of our being. Conscience makes this a personal matter between us and God. This is a demand of every man to do his moral duty under penalty of ultimate self-destruction. Thus Duty becomes the highest and most essential element of human life, and only where

²¹ Appendix. Note 21.

²² Cousin's Lectures on "The True, the Beautiful, and the Good."

it is found can Faith and Hope abound to the redemption of Life for evermore.²³

THE ELEMENTS OF DUTY.

Practical ethics may be resolved into a question of Life, in the maintenance of moral health, satisfaction, and culture. Where these exist, the ends of Life are subserved. Otherwise, it is limited, harassed, or even totally destroyed.²⁴ There are three main spheres of duty, with many variations.

1. Duty to one's self. This includes proper care of the body; the right use of the mind, and of time and opportunity for doing good; the culture of pure affections and worthy ideals; the highest possible development of personal talents and characters;²⁵ but we can not enlarge upon these here.

2. Duty to one's fellow-beings. Every life is bound up with others in the common fabric of society. Therefore the mutual relations of influence and reaction are such as must make claims upon us for kindness, benevolence, and sacrifice at the expense of our own natural preference.²⁶ This relation extends in a thousand ways to the family, the community, and the State.²⁷ With all these may be

²³Orr's "Christian View of God and the World," page 360.

²⁴Spencer's "Data of Ethics."

²⁵Parable of the Talents. (Matt. xxv, 14-30.)

²⁶"Who is my neighbor?" (Luke x, 29.)

²⁷Appendix. Note 22.

included the Church, as the moral nurse, guide, and comforter to all classes and touching all interests.²⁸

3. *Duty toward God.* All lives are dependent upon God. Therefore the highest of all obligations is to do that which is in harmony with his will and wisdom, and to cultivate this disposition in acts of worship, habits of obedience, and the practice of virtue, thus entering into fellowship with the Divine Spirit in the supreme motives of Life.²⁹

THE BASIS OF VALUES AND OF TRUTH.

Here we see that the province of Ethics, as based upon Duty, is distinct from that of *Æsthetics*, which is based upon the Agreeable. Yet each may be considered as a quasi-correlative of the other in contributing to the enlargement of the sphere of Life, rendering it both blessed and beautiful.

The principle of relative worth or "values," as forming the basis of both *æsthetics* and ethics,³⁰ or as furnishing the elements of a science of morals³¹ or as transferred directly to faith and experience,³² may be wholly covered by referring both morals and religion to the contributory elements of Life. "Worth makes the man,"³³ but what is worth?

²⁸Ireland's "Church and Society."

²⁹"The true Vine." (John xv.)

³⁰Herbart.

³¹Beneke.

³²Ritschl.

³³Hillis's "The Value of a Man to Society."

What else but mental Culture, moral Character, and Religious Faith? In elements like these alone is Immortality desirable or possible to man. In the degree that they are realized now upon this earth are heaven and the kingdom of God anticipated.

But in no case can genuine religion be divorced from the truths of real history, science, or philosophy, or become a mere matter of sentiment or superstition. Rather it must have its beginning and end in the eternal harmonies of Truth and Life and Love, in the blessed Spirit of God, and in His Heavenly Kingdom.

AXIOMS.

The highest type of being is a Person, and the highest being is God.

The highest form of reason is Inference, and the highest Reason is Intuition.

The highest idea of finality is the fullness of Life, and the highest finality must be Heaven, a happy Immortality.

CONCLUSION.

The first stage of Intellect is Naivèté, both in individuals and nations, and from this arise both Myth and Poetry, of which we have many instances in History.

The second stage is Materialism, which cultivates Industry, Commerce, Politics, Criticism, Art,

Science, and Invention, but is often skeptical of the overworld.

The third stage is Spiritual Faith, when the soul grows weary of the things that perish, and with chastened and clarified vision now sees the Moral, the Eternal, and the Divine, as Realities closely and constantly related to our human Life.

APPENDIX

NOTE 1.

(From page 11.)

RELIGIOUS faith must have a satisfying basis in order to retain its hold permanently upon men. Hegel declares that much of our preaching is sophistry, and therefore dangerous to faith.

“Sophistry has nothing to do with what is taught: that may possibly be true. The Sophistry lies in the formal circumstance of teaching it on grounds which are as available for attack as defense.”¹ The passage is rather obscure, but suggests much.

NOTE 2.

(From page 15.)

Character can not long be maintained unless it has some solid basis of moral conviction. All the splendid ideals of our best writers, Tennyson, Browning, Ruskin, Liddon, Drummond, Hugo, Bersier, Sabatier, Longfellow, Whittier, Emerson, Lowell, Beecher, Brooks, require some moral and intellectual foundation for effectiveness. The moral decadence and pessimism of to-day are due chiefly

¹“Logic,” by Wallace, page 229.

to an eclipse of faith. The philosophical vagaries of the present time are both an indication and an aggravation of spiritual estrangement from God. Not angelic innocence, but simplicity and sincerity of heart are the happy estate from which even good men seem to have fallen in these later days of sophistical Idealism and Materialism.

NOTE 3.

(From page 16.)

The method of sound philosophy is essentially the same as that of true science; namely, Observation, Analysis, and Generalization, with proof by verification. Here also common sense must be an ally of Certitude, for without it there can be nothing in Philosophy but speculation of an idle sort, and often of a dangerous tendency. Sound sense is something like what is called Intuition in this book; but it is also the saving clause in Logic which prevents that kind of insanity called universal skepticism. In Philosophy it is the element of reasoning which can rise above mere experience without losing sight of the solid grounds of its origin. Although our method may appear labored by comparison with others, we shall gain firmer ground at last by keeping in close touch with Nature.

NOTE 4.

(From page 35.)

Kant's doctrine that we can not positively know anything outside of our own consciousness is capable

of proving too much for his purpose, since our knowledge of what goes on *in* the mind is certainly one of the last and ripest fruits of mental discipline. We may question also the claim of Idealism that all sound knowledge comes from logical processes. On the contrary, in the analysis of any general subject, or in such work as mechanical invention, artistic composition, or literary production, the elements brought into our mental view or grasp are derived from no regular logical process, because there is no starting-point for such a process. One simply keeps his attention upon the subject steadily until the analysis or solution or fitting conception "dawns" upon his mind. That is to say, it comes in a subconscious manner, and the result is therefore intuitive in its nature.

NOTE 5.²

(From page 39.)

The reciprocal influences of body and mind may be compared to those of magnet and coil in an electrical apparatus. The magnet responds to the current passing in the coil, or to the variations of such a current; and it may even make possible the induction of a current in another coil, thus passing on its energy to another magnet, just as the body,

²The recently published researches of Dr. Loeb and Professor Matthews at Chicago seem to show that electricity is a very prominent factor in the phenomena of physical life. But they do not identify electricity with life, since there is no evidence that it can build an organism, much less can it account for consciousness. Yet it may easily be a factor in physical life.

when moved by the mind, may speak or make gestures that arouse a corresponding thought in another mind, and lead to a corresponding action of the body connected with that mind. The moving of a magnet by external force may also act directly upon the coil to induce a current, and this process may be repeated indefinitely; so that by certain combinations of magnet and coil, a reaction may be *built up* to any desired tension by the mere application of external power. In a somewhat analogous manner, body and mind are developed under the influence of food as a means of contributing power. In man, as contrasted with most of the lower creatures, the highly developed brain is analogous to a condenser in connection with an electrical machine, in that it gives room for the large accumulation of a *reserve* force, over and above that actually necessary to the mere operation of the machine.

It is a fact worthy of attention that the magnet and coil are essentially different elements with different forces, yet reciprocal. Also, notwithstanding their exceedingly close mutual dependence in all the operations of an electrical machine, a relation wonderfully similar to that of the body and mind, it is certain that each force may exist *independently*, as in a natural or permanent magnet, or in the electrical phenomena of Nature. Thus the “parallelism” between the body and mind need not depend upon identity between them, nor yet upon a supposititious *deus*

ex machina, but merely upon organic union and sympathy.

NOTE 6.

(From page 49.)

Several elements are said to have been discovered recently in Nature, such as helium, argon, neon, krypton, and xenon, which have few chemical affinities, or none at all.³ If Ether is a substance, as is commonly assumed by physicists, it must belong to an order that is not subject to the law of gravitation, although it readily transmits heat, light, and electrical energy. Up to the present time, it is doubted whether electricity is a mere force, or both a substance and a form of energy; but the principal objections to its substantial being tend to make it out a force in the Ether along with light and magnetism.⁴ The phenomena of Mind are so entirely different from those of mere Matter, that we must conceive of the former either as proceeding from a different kind of substance or as a mere abstraction, and it seems far easier to take the substantial horn of the dilemma. There are various kinds of Energy well known in the physical realm, and possibly also in the mental or physical sphere of existence; although these last are incommensurable with

³Professor W. Ramsay's article on "Inert Constituents of the Atmosphere," in Popular Science Monthly, October, 1901.

⁴See Professor J. J. Thompson on "Cathode Rays," in Harper's Magazine, September, 1901; also Professor Fleming's article on "The Electronic Theory of Electricity," in Popular Science Monthly for May, 1902.

the physical forces as certainly as Mind is incommensurate with Matter. But this does not prevent their interaction upon each other any more than does the incommensurability of Ether and Matter prevent the constant transmission of energy from one to the other. All the known facts seem to point toward the existence of a greater variety of both substances and forces than have yet been caught in the laboratories.⁵

NOTE 7.

(From page 56.)

The study of logic dates substantially from Aristotle, and was in great repute in the days of Scholasticism. Logic or dialectic, in good hands, is as brilliant and complicated as a game of chess or a fencing bout with rapiers, but just as futile in results. It may serve to clarify our knowledge, yet depends wholly on premises. Fresh developments in this field have been made by Hamilton, Mill, and others. Lotze has a specially full development of logical forms. In addition to the ordinary form of induction and deduction, he adds analogy as a third kind of syllogism. Then he also brings in the algebraic devices of substitution and comparison as other varieties of the syllogism. Finally, he includes "constitutive comparison" in the list, and apparently he would include any form of theory or hypothesis that

⁵See Professor Howe's article on "The Periodic Law," in Popular Science Monthly, June, 1901.

may be adopted in order to account for given facts.⁶ Thus we see that the essence of logic is in comparison; and that depends upon our powers of mental perception.

NOTE 8.

(From page 57.)

The tendency of any system of pure deductive reasoning is to tie up everything, including God himself, to a fixed and unalterable order. This may be clearly seen in many great thinkers, both ancient and modern. But a single touch of actual experience breaks this logical cobweb, and shows that we really live in a world of intelligence and freedom. The main support of this fallacious reasoning is a kind of half-truths, the refutation of which is often more difficult than a Chinese puzzle. These half-truths are among the greatest hindrances to real progress in philosophy because they are apt to appear very simple where the whole truth is essentially complex. To see and consider one aspect of the Truth after another is not to separate them in essence, but is necessary in order to reach any comprehensive and satisfactory views.

NOTE 9.

(From page 76.)

Three general classes of mental phenomena are omitted from the diagram, not because of their unimportance, but because they are too numerous to be

⁶Erdmann's "History of Philosophy," page 323.

properly represented there. These are the Emotions, the Talents, and the Affections, which may be classed under the three faculties of Mind, as follows: To Sensibility belong the Emotions, as joy, grief, mirth, melancholy, hope, fear, anger, pity, pride, shame, ambition, sloth. To Intellect pertain the Talents, as skill, taste, wit, sagacity, invention, calculation, ideality, and language. In Character are found the Affections, as love, hate, frankness, deceit, generosity, envy, egotism, modesty, firmness, and instability.⁷ These may be called *traits*, and taken together they constitute the special *temperament* of each individual, because they indicate his prevailing moods and activities which vary like lights and shades of color, or harmonies and discords of sound, as the daily current of experience, thought, and purpose flows along.

NOTE 10.

(From page 79.)

It seems legitimate to ask, Why has not Nature reached a balance of opposing forces and elements long ago, if it has existed from Eternity? And if there are no exceptions to the laws of Natural causation, why are not the phenomena of Nature marked by perfect regularity instead of being subject to variation? The cause of these variations has never

⁷This list is not exhaustive.

yet been fully accounted for by Science.¹⁰ They are simply taken as facts of observation—which is eminently proper,—but they must have causes which extend to the first principles of Nature. Evidently Nature is not a mere machine, for machine-made articles are characteristically uniform, whereas Nature, while adhering to the type, never makes the individuals twice alike. But the most striking feature of the case is that being in a sense so irregular, yet Nature still holds to a golden mean of order and progress as though under the control of an intelligent Power.

NOTE II.

(From page 82.)

The elaborations of Fichte, Schelling, and Hegel are comparable to the illusions of a chamber with mirror walls. Thus the manifold self-reflections of one's thought may present the same notion in various aspects, yet add but little to its clearness. On the contrary, such a process constantly tends to self-deception by confounding the real with the ideal until the former is completely lost from our apprehension, while often the ideal presentation is only a half-truth at best. Thus Fichte's notion of "self-development," although it contains a great practical truth, yields no real light upon the inner nature or

¹⁰"Origin of Species," Chapter V, First Section, Chapter VI, Sixth Section, and *passim*.

ultimate cause of such development. This term, therefore, appears to be merely assumed to cover what is not understood or can not be explained in language.

The same criticism may apply to Schelling's doctrine of an "impersonal reason," which is defined by the statement that since both Nature and Thought develop according to the same law, therefore both are derived from one and the same "absolute" source. If by this "absolute" he refers to God, there might be some reason in the statement; but since that is not at all what he means, it is mere babble.

In like manner when Hegel says that the "absolute idea" is the "process itself," he seems to be but a step from the common notion of God, which is that He alone is the author and agent of the "process;" and by all analogies of human experience, this is the only correct philosophical position. But that is not at all what Hegel means, nor is it possible to make his position intelligible. We make the same objection when Hegel says that the "absolute" and "reason" are synonymous.

Finally, when Schelling says that Intelligence and Will are but different degrees of the same thing, and that both are merged in the notion of "productivity," why not add sensibility, and merge all three in the principle of Life from God? To stop short of this is a "most lame and impotent conclusion."

The weakness of German philosophical systems

is well exhibited in their mutual refutation by one another; but this weakness arises largely from their apparent purpose to dispense with a personal Deity. Thus the principle of "contradiction," which Hegel presents as the very root of wisdom, is rightly characterized by Herbart as "a mere paradox, and no solution at all." But Herbart goes to an equally foolish extreme when he says, "Causation can not signify anything but Reality, and at the utmost self-preservation." Such discourse means nothing but to beat the air with empty phrases.

Schopenhauer, also, has a goodly lot of nonsense about the Will, really identifying it with Nature, but giving no sound reason for such a procedure. He calls Will "the endless source of all life," thus simply reversing the common-sense view of mankind. Yet in his standard phrase, "The world is my Idea," he does bring out the point that one's "Idea" or Conception of the world may go on increasing or developing indefinitely, both extensively and intensively. Even this doctrine would seem to leave some ground for human hope and courage; but strangely enough, Schopenhauer is at the antipodes of sane and wholesome sentiment in his conclusions that being or life is synonymous with suffering, that the propagation of the human species is an evil, and that absolute negation of the Will is the only happiness! What is the use of such philosophy as that?

It is happily true that Hartmann makes some

improvement on Schopenhauer, but still he reaches no real landing-place that is at all satisfactory. Lotze does far more justice to the psychical and logical elements of Mind and the Universe; yet even he leaves too many questions in a state of unstable equilibrium. This is doubtless the reason why so many of his disciples in this country profess to have no definite system or fundamental doctrine at all, which seems a confession of weakness and lack.

NOTE 12.

(From page 88.)

Among the characteristics of Life, the first, *Heredity*, distinguishes the operations of the vital force from those of all other forces, not merely in the constant repetition of similar forms or organisms, but in their constant relation of dependence upon previous similar forms or organisms, which is not true of crystals, raindrops, storms, volcanoes, or any other non-organic phenomena of Nature. The notion of Heredity includes both the type of a given form and nature, and also the acquired traits of each type so far as they are transmitted to after generations. But the possible inherent permanence of the type may be seen in the fact that living corals, mollusks, and other organisms differing but slightly from those of the Silurian ages, are still extant. Certainly the environment has an influence on the character of an organism; but the extent of this influence is not yet

fully determined, and the line between persistent and non-persistent characteristics is still debatable. Whether inherited characteristics are sufficient to account for the vast variety of plants and animals now on the earth is still disputed among the leaders of scientific thought. The disciples of Lamarck affirm the proposition, while those of Darwin deny it, and with them we leave it for further discussion.⁸

In any case the fact remains that Heredity is one of the most powerful characteristics of Life, as it is also one of the most unaccountable, in view of the demonstrated minuteness and similarity of all germ-cells of whatever kind, in either plant or animal. It is simply baffling to our comprehension to see that among so many kinds and forms of life, and with so little apparently to control each form in its inceptive state, yet each in its development reproduces the traits of its own ancestry, even to the most subtle qualities of organization, habit, instinct, or feature. The variations, though often strange, are not half so remarkable as the far-reaching fidelity to ancestral type.⁹

Another characteristic of Life is Sympathy, by which term we wish to designate the general pervasiveness of a fellow-feeling or instinct among the individuals of a species which leads them to associ-

⁸Packard's "Lamarck, the 'Founder' of Evolution."

⁹Darwin's "Origin of Species," Chapter V, Section on "Analogous Variations."

ation, mutual protection, and sacrifice for others. A fundamental example of this characteristic may be found in the *phagocytes*, those corpuscles of the blood which attack and destroy the germs of disease when these are introduced into the circulation. But such examples are found everywhere in plants and animals. The mating of the sexes, the care of offspring, the tendency to cleave together for the common good, are seldom absent. It is as though each individual were conscious in some dim way of the law of its own being, and also of its share and duty in the general welfare. The insects that dwell in communities; the animals, like prairie-dogs, that live in villages, or like wild hogs or buffalo, that roam in herds, are a few among many familiar examples. Frequently there is a cross-relation of dependence between different species, or even between types that are wholly unlike, as where the owl dwells with the prairie-dog, or the pilot-fish associates with the shark, or the orchid grows on the boughs of the tropical forest, or pollen is carried from flower to flower by bees, or the dog follows man as his friend and master. In these and many similar instances that might be called from the volume of Nature, we may perceive a hidden impulse that binds the world of living things in a community of interest and service which is quite foreign to the nature and history of inorganic things.

The last characteristic that we mention is Peri-

odicity, which is the universal tendency of living things to accomplish their history in cycles. Each individual life is marked off by buds, by joints or ridges, by annular rings, by pulse-beats and respirations, by wakefulness and sleep, by times of activity and rest, by periods of growth followed by ultimate decay. In some individuals these stages are longer, in others they are shorter; but in all they show the singular force and also the limitations of Life. The line of generations may, indeed, run on indefinitely, since the individual perishes while the race survives, sometimes in an almost unmodified line for thousands of years, when conditions are favorable to its subsistence. However, there is nothing to show that Life may not rise above these limitations in some higher sphere of existence.

NOTE 13.

(From page 110.)

Although a professed Christian believer, Paulsen ridicules Teleology as an argument for the existence of God.¹¹ He even makes much of Haeckel's "dysteleology," and rehashes the latter's talk about failures in Nature, wasted germs of life, the useless organs of man, and desert regions of the earth, as if these mere negations should weigh anything against the positive facts that reveal design in Nature. He quite overlooks the consideration that *any single*

¹¹"Introduction to Philosophy," page 167, etc.

combination of elements, conditions, and organic structure which renders possible the existence of physical life on this planet or anywhere, is an irrefragable argument for Finality, since the law of chances is necessarily against such a fortuitous arrangement, millions to one. Paulsen also expresses a fancy that other creatures besides Man might indulge a fond conceit that the world was made for them, if their pasture was good, and their lives were reasonably secure from harm. Of course, the world does exist for the happiness of all God's creatures that are brought into being here, each in his own place and order. But Paulsen willfully ignores the fact that Man is the culminating product of Nature by virtue of his physical and mental organization. Such reasoning as Paulsen's is mere perversity, since it quite ignores common sense, above all when he declares that Finality is merely the development of innate, unconscious Will, and so depends simply upon where you fetch up. This seems to be the climax of unreason.

NOTE 14.

(From page 112.)

As to *how* "God created the world and all that is therein," whether by "emanations" of the Divine essence according to Plotinus, or by the power of "an immanent idea" according to Kant, we perceive that these terms have no clear and certain rational significance for us. Here we reach a plane of being

which is beyond our utmost thought or knowledge because we can have no data nor principles from which to reason. Since we can not even grasp the secret of Life when it is directly with us, we may well hesitate to presume much on these loftier matters. But this need not militate against such matters of experience and reason as are fairly within our reach under present conditions. These conditions are a very definite limitation upon the range of our knowledge, but they should not and can not affect the validity of what we do know.¹² A single known fact or principle is worth a thousand guesses, and it were folly to throw away our practical certainties for mere conjectures. Possibly in some future state, our faculties may be enlarged so as to grasp more and higher forms of certainty; and if so, our Philosophy will be more perfect.¹³

NOTE 15.

(From page 113.)

Some of the distinguishing marks of man's superiority over the lower animals are:

1. His greatly enlarged and more highly developed brain, as compared with the rest of the mammalia.
2. His erect position, standing upright upon two feet, in contrast with quadrupeds and quadrupedal man.
3. His smooth and often fair skin, whereby

¹²Roger's "Modern Philosophy," pages 50-53.

¹³Hamilton's "Philosophy of the Conditioned."

beauty is subserved, and the area of sensibility vastly increased.

4. His mobile countenance, with power of emotional expression far beyond that of any other creature.

5. His articulate voice, capable of development in speech and song, such as no other creature possesses.

6. His two flexible hands, with their manifold adaptation to tasks which are only for intelligent beings.

7. His intellectual and moral sense, without which man's social existence and general progress would be impossible.

If any one or more of these characteristics could be taken away from humanity, the loss would be almost immeasurably great. Therefore the concurrence of these traits seems to show conclusively that man's place in Nature is not the result of a mere chance, nor even of a mere development under the law of chances, but is the outgrowth of a splendid, Divine plan.

NOTE 16.

(From page 117.)

If God be a Personal Being, as we have set forth in our arguments from the Transcendency, Origin, and Destiny of Nature, then surely He must be aware of all truth that we can possibly know, including morality.

It is unthinkable that a Being of God's power, wisdom, and perfections, as manifested in the world around us, should not appreciate and follow these principles of justice, truth, benevolence, and virtue which appeal to all that is highest and best in ourselves, and which contain the most precious of all "values."

But it certainly *is* thinkable that, since we are created with a moral sense or capacity, God should provide some way of ministering to this capacity in a practical manner, just as He has done in Nature for our physical and even our intellectual requirements, as already stated.

If Man and the visible universe are the work of God, then surely whatever Man can do, God can do equally well,—if not, indeed, far better than we,—in making known his Truth and Will, in controlling the elements and the course of events, in mastery over the issues of life and death; so that the notions of providence, revelation, and religion are certainly reasonable, whatever some short-sighted men may think or say to the contrary.

NOTE 17.

(From page 122.)

SOME SCIENTIFIC SUGGESTIONS OF IMMORTALITY.

1. The persistency of physical life in certain cases, as of a coral which has been growing steadily upward for tens of thousands of years; and this will continue while the conditions of depth, temperature,

etc., are favorable to its life. Why may not the conditions be made favorable for a continued life of the soul after its separation from the corruptible body of flesh and blood?

2. Many material things produced in and by organic life are capable of indefinite preservation. Shells, hair, teeth, wood, oil, nuts, and grain may be preserved intact for ages. Suppose that the soul is an ethereal outgrowth of the physical body, why may it not also last indefinitely, just as a beam of light may be projected on in space forever?¹⁴ *If now this beam could be polarized into a vortex like an electrical fire-ball, it might persist as a body, and be endued with properties that are physically inconceivable, a spirit cell or body.*

3. The metamorphoses of batrachians and of insects, although not bearing directly upon the doctrine of a personal immortality, yet demonstrate that amazing changes are possible without a loss of real identity; so that nothing appears to be impossible to God, if it but enter into his plans. Thus we see that natural Science, by her suggestions, does give some strong hints to both Philosophy and Theology for the solution of these transcendent problems.

¹⁴The laws of motion also favor this conception as a possibility, since a body in motion goes on forever, unless it is stopped by some resistance. See article by N. E. Gilbert in "Terrestrial Magnetic and Atmospheric Electricity," for December, 1901, on "Relations between Ether, Matter, and Electricity."

NOTE 18.

(From page 122.)

If the soul persists after separation from the physical body, it must be endowed with substantial as well as phenomenal being. Probably this is also true of the electrical fire-balls or globes above referred to, and which the author himself has witnessed. The existence of Hertz waves, of Roentgen rays, and of the sympathetic action used in wireless telegraphy, offer some striking analogies to certain recondite psychic phenomena. Thus electricity seems to be a kind of stepping-stone from the material to the spiritual, since we must regard the latter as having real existence.

Now, if the question be raised, whence come the substance and the powers of the soul? we may conceive them to be derived from a universal *plenum*, under the vital functions of the living body, thus following again the analogies of electrical phenomena to the Mind.¹⁵ What is this *plenum*? Some will say that it is the Absolute Being, the soul of the world, the source and repository of all Ideas, and perhaps of Life as well. This appears to be essentially the outcome of all modern Philosophy, and we are not seriously disposed to dispute such a view, *if only it be allowed that God may impart such life*

¹⁵It is the property of Life to produce organized being; hence even a disembodied spirit, still living, would be an organized being in contrast with the elements of Nature.

to the world, such spiritual being to man, from his own Essence, without in any degree impairing or lowering his own Personality. There is one passage in the Old Testament that seems to favor this view of the matter, Genesis ii, 7.

We may certainly distinguish three spheres of being, namely, physical, ethereal, and psychical. Each has its own substance; each has its own forms of energy; and each has also its peculiar laws. How far each is independent of the others is not yet clear, but it seems certain they are not identical, and the *greatest* of the three is psychical. Perhaps the Ether is a bond of union or a sort of medium between the other two, with its all-pervading, all-enfolding conductivity, and its almost infinite subtlety of texture and action. Then if Mind is also a threefold Reality, we may conceive of Perception as an impression upon the psychical substance, Judgment as a process of the psychical law, and Choice as the self-directive power of the psychical energy. Each of these seems to extend toward the next faculty in the order named, making a kind of rotation or spiral advance with the onward progress of life.

However these things may be, we still return to the fact that we see around us in Nature the manifold revelations of a Mind that is far superior to these physical conditions, that has laid the foundations and framed the constitutions of the Universe; and if that Mind can exist without a physical body,

it is quite conceivable that our minds may be able to survive our physical bodies, and yet retain their conscious identity.

NOTE 19.

(From page 126.)

The inculcation of suitable and worthy ideals must always be one of the chief ends of popular education. The full appreciation of truth, chastity, fortitude, loyalty, kindness, industry, progress, and liberty is the most powerful of all means for the rapid elevation of any people in both physical stamina and moral character. Nothing can take the place of these ideals, if once they are lost or shattered. Each marked and eminent man is sure to be following some great ideal that he is striving to realize in life, and that is as clear and beautiful to him as any creation of the poet, painter, or sculptor could be, although the man may not always be conscious of that fact. This is the kind of Idealism that makes for power.

Every country, too, has its ideals which profoundly affect the national character. Among the ancients Egypt cherished majesty, Greece beauty, and Rome organization. Among moderns, England is distinguished for precedent, fair play, and practical sense; Germany for individuality, thoroughness, and mysticism; France for splendor, refinement, and good fellowship; Spain and Italy for pas-

sion, pride, and artistic power; Switzerland and Holland for courage and thrift; Russia for ambition and autocracy; the United States for liberty and progress. These ideals are usually imperfect or one-sided; but in proportion to their excellence they tend to national greatness; therefore all conspicuous examples of heroism, virtue, and genius are among the most priceless possessions of any people, and should be commemorated by legends, festivals, and monuments.

NOTE 20.

(From page 128.)

Religion, even when of a low and imperfect type, has an influence in promoting social order and cementing together the various public interests into one social organism, that is well-nigh indispensable to the growth and development of any large community of people. This can be seen in every great civilization of antiquity, and also in the formative stages of modern Europe up to the nineteenth century. It is the one conserving element of European society at the present time.¹⁶

Far from having outgrown this principle, the world is likely to see religious questions among the most prominent influences to affect the future of civilization. The latter's permanency depends in part on the overthrow of Mohammedanism as a

¹⁶Le Bon's "Psychology of Peoples," Book IV, Chapter II.

dominant force in the East, and this can not be accomplished without a vital religious faith to unite all the Powers of Europe in support of Christian principles.

The question of religion and the State is by no means finally settled. A certain degree of freedom for both is essential to harmony, but the Church can not be wholly set aside by any permanent government. She is necessary for the instruction, control, and comfort of individuals, and also as the constant guardian and educator of the public conscience. Without a religious conscience, the State gradually becomes putrescent.

NOTE 21.

(From page 129.)

Moral discipline is one of the necessities of social welfare. Therefore some degree of wholesome restraint must be exercised upon crime and abuses of every description. That many kinds of evil are difficult to suppress is no good reason why they should be allowed free license by the State. Slavery, prostitution, intemperance, and gambling should be sternly held in check by any people who desire to enjoy the blessings of good order and permanent prosperity. Crime should not be punished excessively, nor should it be dealt with leniently; but whatever punishment is reasonable should be sure and speedy, without respect of persons. Crimes

against property should not be more severely punished than those against the person, since the latter are more brutal and inexcusable. Experience amply shows that moral conditions depend largely upon the faithful execution of wise and just laws. The majority of men are ever creatures of circumstances, and are greatly influenced by law and public sentiment. The abuse of justice in the courts is a sure provocation of disrespect for the law and of public disorder. No people can long remain free who will not pay the price of it in intelligent loyalty to their free institutions.

NOTE 22.

(From page 130.)

Competition is natural, but dangerous when carried to the extreme in business or in other walks of life. "To live and let live" is as just and sensible as it is homely and unappreciated. No other basis of dealing can yield permanent prosperity, even to those classes who seem to have the largest possible advantage over others.

Wars should be held justifiable only in case of the direst necessity. The profession of arms should be limited to a police force only, or used as a protection against unavoidable dangers. The present rivalry of military and naval establishments threatens financial and moral ruin to several of the greatest nations.

Each separate people on the earth should be allowed to work out its own civic destiny without foreign interference, except to protect from gross and palpable abuses of the gravest sort. No nation has any more right to make war upon another nation for commercial advantages than any man has a right to compel his neighbor to trade with him at the revolver's muzzle. One great charm of the world's life would be lost, if the individuality of nations, the small as well as the great, should be destroyed. The advantage of mutual reactions in a considerable group of distinct peoples is seen in modern Europe, where more general progress has been made in the last few centuries than in any one great empire or republic of similar extent in any age.

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